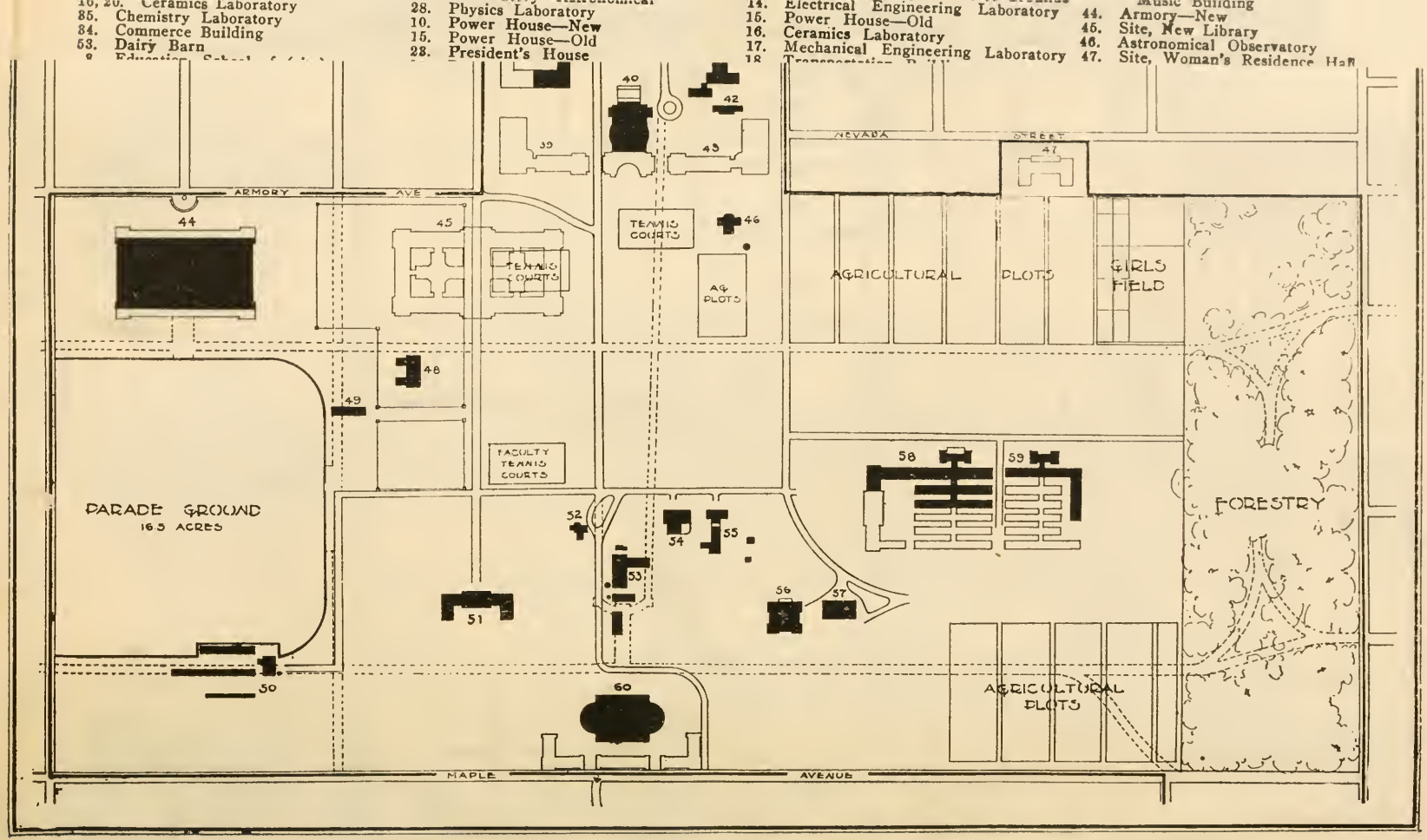
16, 20. Ceramics Laboratory
35. Chemistry Laboratory
34. Commerce Building
53. Dairy Barn

28. Physics Laboratory
10. Power House—New
15. Power House—Old
23. President's House

14. Electrical Engineering Laboratory
15. Power House—Old
16. Ceramics Laboratory
17. Mechanical Engineering Laboratory

Music Building
44. Armory—New
45. Site, New Library
46. Astronomical Observatory
47. Site, Woman's Residence Hall



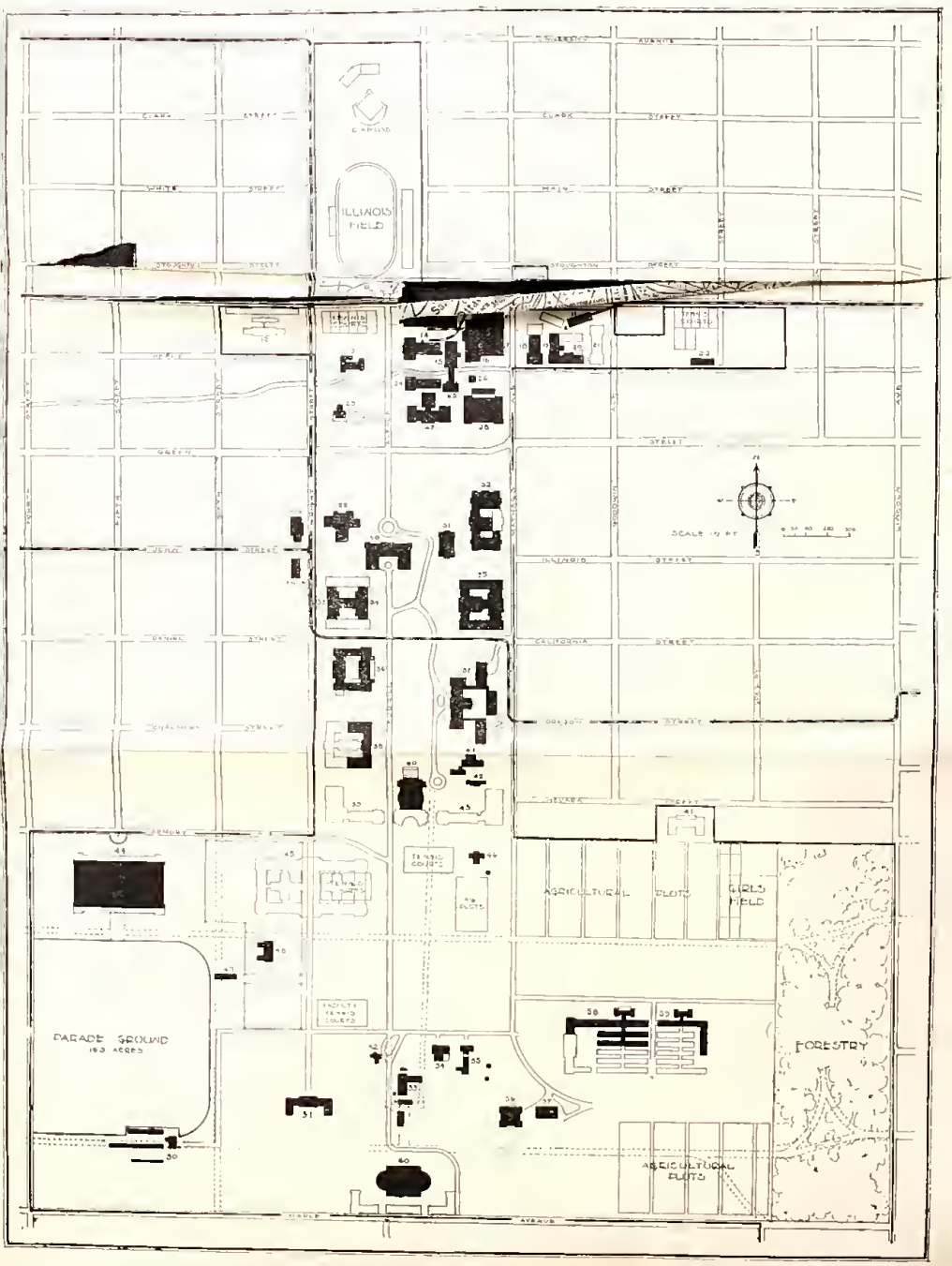
UNIVERSITY OF ILLINOIS CAMPUS, 1915

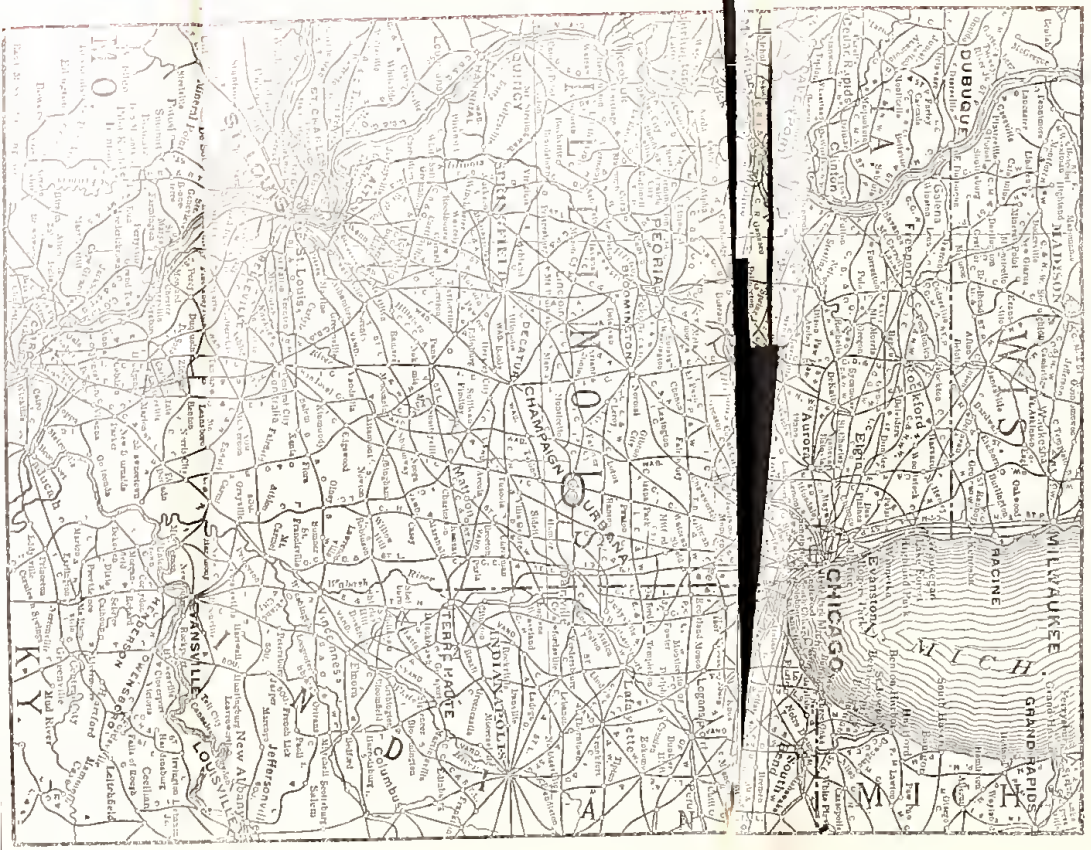
KEY, ALPHABETICAL

33. Administration Building
37. Agricultural Building
67. Agronomy Building
41. Agronomy Greenhouse
39. Alumni Gregory Memorial Building (site)
24. Applied Mechanics Laboratory
44. Armory—New
Armory—Old
astronomical Observatory
49. Auditorium
51. Beef Cattle Building
7. Botany Greenhouses
21. Ceramics Building (site)
16, 20. Ceramics Laboratory
25. Chemistry Laboratory
64. Commerce Building
52. Dairy Barn
8. Education, School of (site)
31. Electrical Engineering Laboratory
27. Engineering Hall
56. Farm Mechanics Building
60. Feeding Sheds
58. Floriculture Greenhouses
9. Forge Shops
6. Foundry
7, 13, 41, 58, 59. Greenhouses
59. Gregory Memorial Building (site)
1. Gymnasium—Men's
54. Horse Barn
48. Horticulture Building
59. Horticulture Greenhouses
55. Implement Barn
4. Laboratory Annex
31. Law Building
29. Library
Library, new (site)
35. Lincoln Hall
11. Locomotive Testing Laboratory
17. Mechanical Engineering Laboratory
9. Metal Shops
49. Military Office
19. Mining Laboratory
45. Music Building (site)
32. Natural History Hall
45. Observatory—Astronomical
25. Physics Laboratory
18. Power House—New
15. Power House—Old
23. President's House
25. Pumping Station
62. Residence
26. Service Building
43. Smith Memorial Music Building (site)
42. State Entomologist's Laboratory
60. Stock Pavilion
22. Storage Warehouse
18. Transportation Building
30. University Hall
12. Vivarium Buildings (site)
36. Woman's Building
47. Woman's Residence Hall (site)
5. Wood Shop

KEY, NUMERICAL

1. Gymnasium—Men's
3. Armory—Old
8. Site, School of Education
4. Laboratory Annex
5. Wood Shop
6. Foundry
7. Botany Greenhouses
8. Metal Shops
9. Forge Shops
10. Power House—New
11. Locomotive Testing Laboratory
12. Site, Vivarium Buildings
13. Greenhouse—Department of Grounds
14. Electrical Engineering Laboratory
15. Power House—Old
16. Ceramics Laboratory
17. Mechanical Engineering Laboratory
18. Transportation Building
19. Mining Laboratory
20. Ceramics Laboratory
21. Site, New Ceramics Building
22. Storage Warehouse
23. President's House
24. Applied Mechanics Laboratory
25. Pumping Station
26. Service Building
27. Engineering Hall
28. Physics Laboratory
29. Library
30. University Hall
31. Law Building
32. Natural History Hall
33. Administration Building
34. Commerce Building
35. Chemistry Laboratory
36. Woman's Building
37. Agricultural Building
38. Lincoln Hall
39. Site, Alumni Gregory Mem. Bldg.
40. Auditorium
41. Greenhouse—Agronomy
42. State Entomologist's Laboratory
43. Site, Tina Weeden Smith Memorial Music Building
44. Armory—New
45. Site, New Library
46. Astronomical Observatory
47. Site, Woman's Residence Hall
48. Horticulture Building
49. Military Office
50. Feeding Sheds
51. Beef Cattle Building
52. Residence
53. Dairy Barn
54. Horse Barn
55. Implement Barn
56. Farm Mechanics Building
57. Agronomy Building
58. Floriculture Greenhouses
59. Horticulture Greenhouses
60. Stock Pavilion

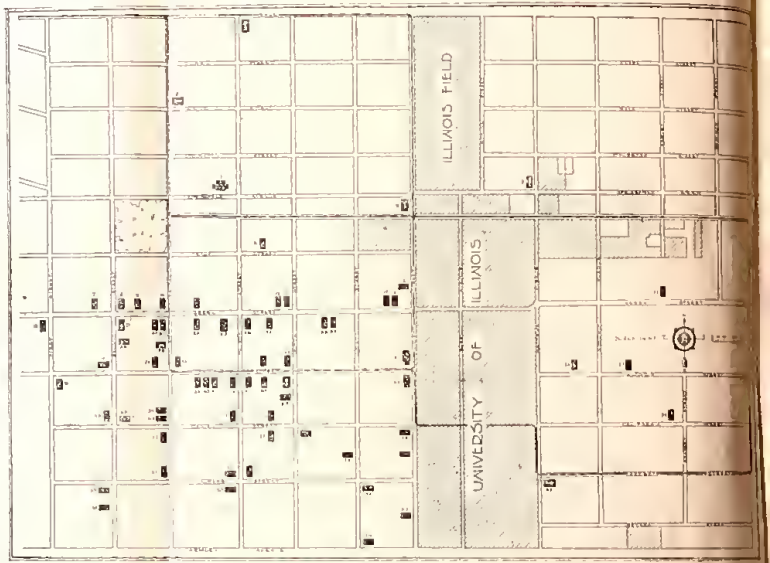




ENVIRONS OF THE CAMPUS, 1915

KEY, ALPHABETICAL

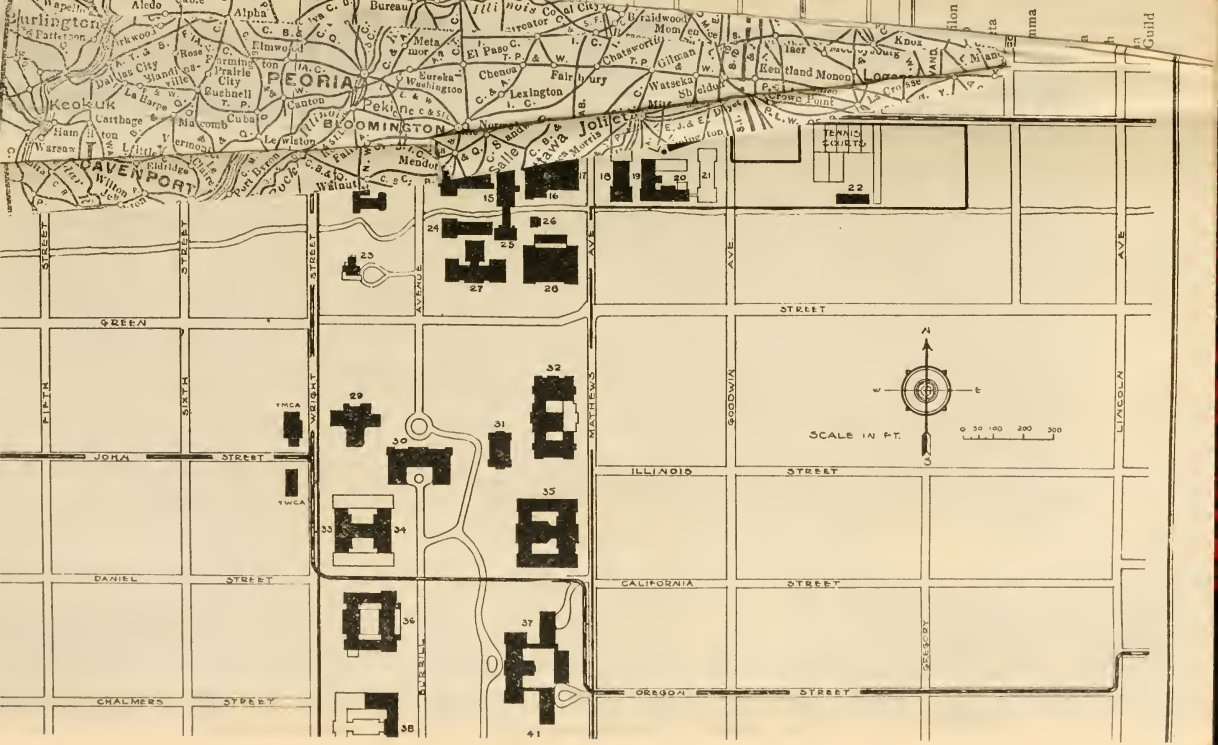
57.	Acacia	64.	Chi Psi	61	Kappa Kappa Gamma
6.	Acanthus	37.	Chinese Club	51.	Kappa Sigma
66.	Aeboth	4.	Church of Christ	60.	Osborne Hall
52	Alpha Chi Delta	23.	College Hall Dormitory	11.	Phi Alpha Delta
41	Alpha Chi Omega	70.	Congregational Guild	68.	Phi Delta Phi
69.	Alpha Chi Sigma	58.	Cosmopolitan Club	2.	Phi Delta Theta
9	Alpha Delta Phi	50.	Delta Gamma	48	Phi Gamma Delta
29	Alpha Delta Pi	43.	Delta Kappa Epsilon	27	Phi Kappa
31.	Alpha Omicron Pi	21	Delta Omega	42	Phi Kappa Psi
26.	Alpha Rho Chi	32.	Delta Tau Delta	65.	Phi Kappa Sigma
53.	Alpha Sigma Phi	13.	Delta Upsilon	20.	Phi Sigma Kappa
44	Alpha Tau Omega	59.	Gamma Alpha	50	Pi Beta Phi
54.	Beta Theta Pi	49.	Gamma Phi Beta	17.	Pi Omicron
3.	Burnham Hospital	2.	German M. E. Church	45.	Presbyterian Church
22	Chi Beta	16.	Illinois Union	17	Presbyterian Hall
55.	Chi Delta	35.	Ilus	7	Psi Delta
40.	Chi Omega	10.	Iris	19.	Psi Upsilon
24.	Chi Phi	56.	Kappa Alpha Theta	1.	St. Peter's Evang. Church
				55.	Sigma Alpha Epsilon
				34.	Sigma Chi
				30.	Sigma Kappa
				15.	Sigma Nu
				14.	Sigma Pi
				28.	Tau Beta Pi
				35.	Tau Kappa Epsilon
				19.	Theta Delta Chi
				18.	Triangle
				5.	Trinity M. E. Church
				67.	Unitarian Church
				36.	University Club
				25.	Y. M. C. A.
				46.	Y. W. C. A.
				63.	Zeta Beta Tau
				18.	Zeta Psi



KEY, NUMERICAL

1.	St. Peter's Evang. Church	19.	Theta Delta Chi	37.	Chinese Club
2.	German M. E. Church	20	Phi Sigma Kappa	38.	Chi Delta
3.	Burnham Hospital	21.	Delta Omega	39.	Delta Gamma
4.	Church of Christ	22.	Chi Beta	40	Chi Omega
5.	Trinity M. E. Church	23.	College Hall Dormitory	41.	Alpha Chi Omega
6.	Acanthus	24.	Chi Phi	42.	Delta Kappa Epsilon
7.	Psi Delta	25.	Tau Kappa Epsilon	44.	Phi Gamma Delta
8.	Phi Delta Theta	26.	Alpha Rho Chi	44	Alpha Tau Omega
9	Alpha Delta Phi	27.	Phi Kappa	45.	Presbyterian Church
10.	Iris	28.	Tau Beta Pi	46.	Y. W. C. A.
11.	Phi Alpha Delta	29.	Alpha Delta Pi	47.	Presbyterian Hall
12.	Psi Upsilon	30.	Sigma Kappa	48	Triangle
13.	Delta Upsilon	31.	Alpha Omicron Pi	49.	Beta Theta Pi
14.	Sigma Pi	32.	Delta Tau Delta	50.	Pi Beta Phi
15.	Sigma Nu	33.	Ilus	51.	Kappa Sigma
16.	Illinois Union	34.	Sigma Chi	52.	Alpha Chi Delta
17	Pi Omicron	35.	Y. M. C. A.	53.	Alpha Sigma Phi
18.	Zeta Psi	36.	University Club	54.	Gamma Phi Beta

55.	Sigma Alpha Epsilon	61	Kappa Kappa Gamma
56.	Cosmopolitan Club	62.	Phi Kappa Psi
57.	Acacia	63.	Kappa Alpha Theta
58.	Aeboth	64.	Phi Kappa Sigma
59.	Gamma Alpha	65.	Delta Upsilon
60.	Osborne Hall	66.	Alpha Sigma Phi
61.	Phi Delta Phi	67.	Unitarian Church
62.	Phi Delta Theta	68.	Zeta Beta Tau
63.	Alpha Chi Sigma	69.	Alpha Chi Sigma
64.	Congregational Guild	70.	Congregational Guild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BLOOMINGTON
DAVENPORT
Keokuk
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Alpha
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Princeton
Peru
La Salle
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Chenoa
Lexington
Fairbury
Chatsworth
Gilman
Watseka
Momence
Braidwood
Kankakee
Manteno
Kentland
Monon
Logansport
Knox
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Eldridge
Wilton
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Carthage
Hamilton
Warsaw
Lewiston
Canton
Pekin
Eureka
Washington
Metamora
Elmwood
Dallas City
Yandes
Prairie City
Bushnell
Macomb
Cuba
Farmington
Rushville
Roseville
Ross
Tennessee
Illinois
Wisconsin
Indiana
Michigan
Iowa
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Nebraska
Minnesota
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Mississippi
Alabama
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Florida
South Carolina
North Carolina
Virginia
Tennessee
Kentucky
West Virginia
Ohio
Pennsylvania
New York
Vermont
New Hampshire
Maine
Massachusetts
Rhode Island
Connecticut
New Jersey
Delaware
Maryland
Washington
Oregon
California
Idaho
Montana
Guild
TENNIS COURTS
GREEN STREET
JOHN STREET
DANIEL STREET
CHALMERS STREET
ILLINOIS STREET
CALIFORNIA STREET
OREGON STREET
FIFTH STREET
SIXTH STREET
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Learning and Labor

University of Illinois

ANNUAL REGISTER
1914-1915

General Announcements, 1915-1916
Faculty and Courses, 1914-1915
Students, 1914-1915

URBANA
PUBLISHED BY THE UNIVERSITY
FEBRUARY, 1915


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CALENDAR 1914, 1915, 1916

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AUGUST

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JANUARY

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JANUARY

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MARCH

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THE UNIVERSITY CALENDAR

1914-1915-1916

FIRST SEMESTER, 1914-1915

Sept. 8, Tues.	Quarterly meeting of the Board of Trustees
Sept. 14-18, Mon. to Fri.	Entrance examinations
Sept. 21, Mon.	Registration, School of Pharmacy
Sept. 21-25, Mon. to Fri.	Entrance examinations, departments in Chicago
SEPT. 21, 22, MON., TUES.	REGISTRATION DAYS
Sept. 23, Wed., 8 a. m.	**Instruction begun**
4 p. m.	Freshman convocation
Sept. 28, Mon. to Thurs.	Examinations for the removal of conditions, College of Medicine
Oct. 1, Thurs.	Registration, Colleges of Medicine and Dentistry
Oct. 5, Mon., 4 p. m.	Senate meeting
Oct. 7, Wed.	Registration closes, College of Medicine
Oct. 10, Sat.	Registration closes, College of Dentistry
Nov. 2, Mon., 5 p. m.	Latest day for announcement of subjects for all undergraduate and graduate theses
Nov. 13-15, Fri. to Sun.	Alumni Homecoming
Nov. 19-21, Thurs. to Sat.	High school conference
Nov. 23-25, Mon. to Wed.	Civil Engineering Inspection Trip
Nov. 23, Mon.	St. Louis Symphony Orchestra
Nov. 25, Wed., 12 m.	**Thanksgiving recess begun**
Nov. 30, Mon., 12 m.	**Instruction resumed**
Dec. 3, Thurs.	Illinois Day
Dec. 7, Mon., 4 p. m.	Senate meeting
Dec. 8, Tues.	Quarterly meeting of the Board of Trustees
Dec. 11, Fri.	Junior promenade
Dec. 15, Tues., 8 p. m.	Christmas concert
Dec. 19, Sat.	Holiday recess begun, School of Pharmacy
Dec. 22, Tues., 5 p. m.	**Holiday recess begun**
Dec. 24, Thurs.	Holiday recess begun, College of Dentistry
Dec. 31, Thurs., 5 p. m.	Latest day for submission of outlines of theses by candidates for professional degrees in engineering

1915

Jan. 2, Sat.	Instruction resumed, College of Dentistry
Jan. 4, Mon., 12 m.	**Instruction resumed**
Jan. 8, Fri.	Sophomore cotillion
Jan. 11-23	Short course in Highway Engineering

Jan. 18-30	Short course in Household Science
Jan. 19, Tues.	New York Symphony Orchestra
Jan. 28, Thurs.	**Semester examinations begun**
Feb. 1, Mon., 4 p. m.	Senate meeting
	Second semester begun, College of Dentistry
Feb. 4, Thurs.	**Semester examinations ended**

SECOND SEMESTER, 1914-1915

Feb. 8, 9, Mon., Tues.	Registration days
Feb. 9, Tues.	Post-exam. Jubilee
Feb. 10, Wed., 8 a. m.	**Instruction begun**
Feb. 12, Fri.	Lincoln Day
Feb. 19, Fri.	Military ball
March 2, Tues.	University Day
March 6, Sat.	Annual band concert
March 9, Tues.	Annual meeting of the Board of Trustees
March 23, Tues.	Chicago Symphony Orchestra
April 1, Thurs., 12 m.	**Easter recess begun**
5 p. m.	Latest day for filing of completed theses by candidates for professional degrees in engineering
April 5, Mon., 4 p. m.	Senate meeting
April 6, Tues., 12 m.	**Instruction resumed**
April 15, Wed.	Term for candidates for graduate in pharmacy closed
April 25-May 2.	Spring recess, pharmaceutical chemist course
April 28, Wed.	Commencement, School of Pharmacy
April 29, Thurs.	Commencement, School of Pharmacy
May 14, Fri. evening	Interscholastic oratorical contest
May 13-15, Thurs. to Sat.	Public school art exhibit
May 15, Sat.	Interscholastic athletic meet
12 m.	Latest day for receipt by the Dean of the Graduate School of certified copies of doctors' theses
May, between 15 and 31	Hazelton prize drill
	Annual inspection
	Company competitive drill
May 24-29.	Final examinations, College of Dentistry
May 29, Sat.	Military Day
June 1, Tues., 12 m.	Latest day for acceptance of undergraduate theses
	Latest day for receipt by the Dean of the Graduate School of certified copies of masters' theses
June 3, Thurs.	**Final examinations begun**
June 5, Sat.	Class day and Alumni meeting, College of Medicine
June 7, Mon., 4 p. m.	Senate meeting
June 8, Tues.	Quarterly meeting of the Board of Trustees
June. 10, Thurs.	**Final examinations ended**

June 11, Fri.	Term for candidates for pharmaceutical chemist closes
June 13, Sun.	Baccalaureate address
June 14, Mon.	Class Day
	Senior ball
June 15, Tues.	Alumni Day
JUNE 16, WED.	FORTY-FOURTH ANNUAL COMMENCEMENT
	Commencement, College of Medicine

SUMMER SESSION, 1915

JUNE 21, MON.	REGISTRATION DAY
June 22, Tues.	**Instruction begun**
July 10, 17, 24, 31, Aug. 7	Entrance examinations
Aug. 12, 13, Thurs., Fri.	**Final examinations**

FIRST SEMESTER, 1915-1916

Sept. 14, Tues.	Quarterly meeting of the Board of Trustees
Sept. 13-17, Mon. to Fri.	Entrance examinations
Sept. 20, Mon.	Registration, School of Pharmacy
SEPT. 20, 21, MON., TUES.	REGISTRATION DAYS
Sept. 22, Wed., 8 a. m.	**Instruction begun**
4 p. m.	Freshman convocation
Nov. 1, Mon., 5 p. m.	Latest day for announcement of subjects for all undergraduate and graduate theses
Oct. 4, Mon., 4 p. m.	Senate meeting
Nov. 17-20, Thurs. to Sat.	High School conference
Nov. 24, Wed., 12 m.	**Thanksgiving recess begun**
Nov. 29, Mon., 12 m.	**Instruction resumed**
Dec. 3, Fri.	Illinois Day
Dec. 6, Mon.	Senate meeting
Dec. 10, Fri.	Junior promenade
Dec. 14, Tues.	Quarterly meeting of the Board of Trustees
8 p. m.	Christmas concert
Dec. 21, Tues., 5 p. m.	**Holiday recess begun**
Dec. 31, Fri., 5 p. m.	Latest day for submission of outlines of theses by candidates for professional degrees in engineering
Jan. 3, Mon., 12 m.	**Instruction resumed**
Jan. 10-21	Short course in Highway Engineering
Jan. 17-29	Short courses in Agriculture and Household Science
Jan. 27, Thurs.	**Semester examinations begun**
Feb. 3, Thurs.	**Semester examinations ended**

SECOND SEMESTER, 1915-1916

FEB. 7, 8, MON., TUES.	REGISTRATION DAYS
Feb. 7, Mon., 4 p. m.	Senate meeting
Feb. 9, Wed., 8 a. m.	Instruction begun

Feb. 12, Sat.	Lincoln Day
Feb. 25, Fri.	Military ball
March 2, Thurs.	University Day
March 4, Sat.	Annual band concert
March 14, Tues.	Annual meeting of the Board of Trustees
April 1, Sat., 5 p. m.	Latest day for filing of completed theses by candidates for professional degrees in engineering
April 3, Mon.	Senate meeting
April 20, Thurs., 12 m.	**Easter recess begun**
April 25, Tues., 12 m.	**Instruction resumed**
April 27, Thurs.	Commencement, School of Pharmacy
May 12, Fri. evening	Interscholastic oratorical contest
May 11-13, Thurs. to Sat.	Public school art exhibit
May 13, Sat.	Interscholastic athletic meet
12 m.	Latest day for the receipt by the Dean of the Graduate School of certified copies of doctors' theses
May, between 15 and 31	Hazelton prize drill
	Annual inspection
	Company competitive drill
May 30, Tues.	Military Day
June 1, Thurs., 8 a. m.	**Final examinations begun**
12 m.	Latest day for acceptance of undergraduate theses
June 3, Sat., 12 m.	Latest day for receipt by the Dean of the Graduate School of certified copies of masters' theses
June 5, Mon.	Senate meeting
June 8, Thurs.	**Final examinations ended**
June 11, Sun.	Baccalaureate address
June 12, Mon.	Class Day
	Senior ball
June 13, Tues.	Alumni Day
10 a. m.	Quarterly meeting of the Board of Trustees
JUNE. 14, WED.	FORTY-FIFTH ANNUAL COMMENCEMENT

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*Deceased, February 9, 1915.
†Resigned, December 1, 1914.

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Charles Alton Ellis, A.B., *Assistant Professor of Civil Engineering*

ASSOCIATES

Charles Richard Clark, B.S., *Associate in Architectural Construction*
Arthur Romeyn Seymour, Ph.D., *Associate in Spanish and Adviser to Foreign Students*
Arthur Robert Crathorne, Ph.D., *Associate in Mathematics*
Robert Lacy Borger, Ph.D., *Associate in Mathematics*

Ernest Barnes Lytle, Ph.D., *Associate in Mathematics*
Jacob Zeitlin, Ph.D., *Associate in English*
John Mabry Mathews, Ph.D., *Associate in Political Science*
Ernest Winfield Bailey, M.S., *Associate in Pomology*
Daniel Otis Barto, B.S., *Associate in Poultry Husbandry*
Royden Earl Brand, M.S., *Associate in Dairy Husbandry*
Virgil R. Fleming, B.S., *Associate in Theoretical and Applied Mechanics*
Axel Ferdinand Gustafson, M.S., *Associate in Soil Physics*
Paul Hansen, B.S., *Associate in Sanitary Engineering and Engineer for the State Water Survey*
William Leonidas Burlison, M.S., *Associate in Crop Production*
Harold Wilson Stewart, B.S., *Associate in Soil Physics*
Elmer Howard Williams, Ph.D., *Associate in Physics*
Lurene Seymour, B.S., Ph.B., *Associate in Household Science*
Gustaf Eric Wahlin, Ph.D., *Associate in Mathematics*
Stephen Osgood Andros, AB., B.S., E.M., *Associate in Mining Engineering*
Frederick Charles Bauer, B.S., *Associate in Soil Fertility*
Simeon James Bole, A.M., *Associate in Pomology*
Sleeter Bull, M.S., *Associate in Animal Nutrition*
Arthur Francis Comstock, B.S., C.E., *Associate in Railway Civil Engineering*
William Truman Crandall, B.S., M.S., *Associate in Milk Production*
Florence Rising Curtis, A.B., B.L.S., *Associate in Library Economy*
John Adlum Dent, M.E., *Associate in Mechanical Engineering*
Ira Wilmer Dickerson, B.S., *Associate in Farm Mechanics*
Charles Elmer Durst, M.S., *Associate in Olericulture*
Karl John Theodore Ekblaw, M.S., *Associate in Farm Mechanics*
Ira William Fisk, M.S., *Associate in Electrical Engineering*
Neal Bryant Garver, C.E., *Associate in Civil Engineering*
Cora Emeline Gray, M.S., *Associate in Household Science*
Walter Frederick Handschin, B.S., *Associate in Animal Husbandry, State Leader of County Demonstration Work, and Acting Vice-Director of the Demonstration Service*
Leonard Vaughan James, M.S., E.E., *Associate in Electrical Engineering*
Albert Woodward Jamison, M.S., *Associate in Agricultural Extension*
Walter Edward Joseph, Ph.D., *Associate in Animal Husbandry*
LeRoy Lang, M.S., *Associate in Dairy Manufactures*
Francis Marion Porter, M.S., *Associate in General Engineering Drawing*
Robert Kent Steward, C.E., *Associate in General Engineering Drawing*
Oscar S. Watkins, B.S., *Associate in Horticultural Chemistry*
Ruth Wheeler, Ph.D., *Associate in Household Science*
Albert Lemuel Whiting, Ph.D., *Associate in Soil Biology*
Carroll Carson Wiley, C.E., *Associate in Civil Engineering*
Charles Henry Woolbert, A.M., *Associate in Public Speaking and English*
Philip Sheridan Biegler, B.S., *Associate in Electrical Engineering*
George Denton Beal, Ph.D., *Associate in Chemistry*
Clarence Valentine Boyer, Ph.D., *Associate in English*
Herbert LeSourd Creek, Ph.D., *Associate in English*
B Smith Hopkins, Ph.D., *Associate in Chemistry*
Paul VanBrunt Jones, Ph.D., *Associate in History*
Duncan Arthur MacInnes, Ph.D., *Associate in Chemistry*

Theodore Calvin Pease, Ph.D., *Associate in History*
Gertrude Schoepperle, Ph.D., *Associate in English*
Charles Manfred Thompson, Ph.D., *Associate in Economics*
Ira Dent Allison, B.S., *Associate in Horticulture*
John Joseph Gardner, M.S., *Associate in Pomology*

LECTURERS

Edna Lyman Scott, *Special Lecturer on Library Work for Children*
George Benjamin Rice, *Lecturer on the Installation and Operation of Mechanical Equipment for Buildings and Assistant Mechanical Engineer in the Office of the Supervising Architect*
William Arthur Chase, LL.B., C.P.A., *Lecturer on Accountancy and Commercial Law*
Robert Enoch Hieronymus, A.M., LL.D., *Community Adviser and Lecturer*

INSTRUCTORS

Daisy Luana Blaisdell, A.M., *Instructor in German*
Henri Jacobus van den Berg, *Instructor in Piano*
Edgar Thomas Lanham, *Instructor in Forge Shop*
Albert Austin Harding, *Instructor in Wind Instruments and Director of the University Military Band*
Mary Minerva Wetmore, *Instructor in Art and Design*
Harry Lovering Gill, *Instructor in Track Athletics*
Harry Frederick Godeke, B.S., *Instructor in Mechanical Engineering*
George Wellington Pickels, Jr., B.C.E., C.E., *Instructor in Civil Engineering*
Charles Marshall Poor, Ph.D., *Instructor in German*
John Giffin Thompson, Ph.D., *Instructor in Economics*
Frank Walker Reed, Ph.D., *Instructor in Astronomy*
George Paul Boomsliter, B.S., *Instructor in Theoretical and Applied Mechanics*
Florence Mary Kirkup, *Instructor in Voice*
Clarence Eugene Noerenberg, B.S., A.E., *Instructor in Theoretical and Applied Mechanics*
Fred B Seely, B.S., *Instructor in Theoretical and Applied Mechanics*
Charles Allyn Williams, Ph.D., *Instructor in German*
Newton Edward Ensign, A.B., B.S., *Instructor in Theoretical and Applied Mechanics*
Robert Edwin Kennedy, *Instructor in Foundry*
William Horace Rayner, B.S., *Instructor in Civil Engineering*
Harvey Herbert Jordan, B.S., *Instructor in General Engineering Drawing*
Aubrey John Kempner, Ph.D., *Instructor in Mathematics*
John Lyon Rich, Ph.D., *Instructor in Geology*
Harold Ordway Rugg, C.E., *Instructor in General Engineering Drawing*
William Herschel Smith, M.S., *Instructor in Animal Husbandry*
Raymond Earl Davis, B.S., *Instructor in Civil Engineering*
Armin Hajman Koller, Ph.D., *Instructor in German*
Joseph Howard Beard, A.M., M.D., *Instructor in Physiology*
Edward Wilson Chittenden, Ph.D., *Instructor in Mathematics*
Arthur Charles Cole, Ph.D., *Instructor in History*
William Wells Denton, Ph.D., *Instructor in Mathematics*
Marvin Edward Jahr, A.B., *Instructor in Farm Mechanics*

Robert Taylor Jones, B.S., *Instructor in Architecture*
Joseph Mitchell Kellogg, M.Arch., *Instructor in Architectural Design*
Edson Wilfred Morphy, *Instructor in Violin*
Chester Otis Reed, B.S., *Instructor in Farm Mechanics*
Lambert Thorp, Ph.D., *Instructor in Chemistry*
Edna Almeda Treat, B.Mus., *Instructor in Piano*
Lowell Leslie Townsend, A.M., *Instructor in Piano*
Charles George MacArthur, A.M., *Instructor in Physiological Chemistry*
Olin Harris Moore, Ph.D., *Instructor in Romance Languages*
Ernest James Reece, Ph.B., *Instructor in Library Economy*
Ethel Bond, A.B., B.L.S., *Instructor in Library Economy and Assistant in charge of the Collections in Library Economy*
Edwin John Manley, *Instructor in Swimming*
Samuel Chatwood Burton, A.M., *Instructor in Architecture*
Heber Dignam Nasmyth, *Instructor in Voice*
Clarissa Rinaker, Ph.D., *Instructor in English*
Harley Jones VanCleave, Ph.D., *Instructor in Zoology*
Henry John Broderson, Ph.D., *Instructor in Chemistry*
Josephine Elizabeth Burns, Ph.D., *Instructor in Mathematics*
Mervin James Curl, A.M., *Instructor in English*
Easley Stephen Jones, A.M., *Instructor in English*
Walter Byron McDougall, Ph.D., *Instructor in Botany*
Queen Lois Shepherd, Ph.D., *Instructor in Philosophy*
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Philip Stephan Barto, Ph.D., *Instructor in German*
Verna Brooks, A.B., *Instructor in Physical Training for Women*
Arthur Boquer Domonoske, M.S., *Instructor in Machine Design*
Elmer Tryon Ebersol, A.B., B.S., *Instructor in Crop Production*
Roy Newton Fargo, B.S., *Instructor in Physical Training for Men and Director of the Men's Gymnasium*
Forest Addison Fisher, B.S., *Instructor in Soil Physics*
Georgia Elizabeth Fleming, B.S., *Instructor in Textiles*
Stella Mary Hague, Ph.D., *Instructor in Botany*
Florence Harrison, B.S., *Instructor in Household Science*
Robert William Hoffman, B.S., *Instructor in Landscape Gardening*
Ray Stillman Hulce, M.S., *Instructor in Milk Production*
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Harrison August Ruehe, B.S., *Instructor in Dairy Manufactures*
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Frank A Cushing Smith, B.S., M.L.A., *Instructor in Landscape Design*
Grace Esther Stevens, A.B., *Instructor in Household Science*
George Frisbie Whicher, A.M., *Instructor in English*
Harry William Waterfall, B.S., *Instructor in Machine Design*
Christian Alban Ruckmich, Ph.D., *Instructor in Psychology*

Harold Eaton Babbitt, B.S., *Instructor in Municipal and Sanitary Engineering*
Harry Gardner, M.S., *Instructor in Theoretical and Applied Mechanics*
Alexander Vallance, M.E., *Instructor in Theoretical and Applied Mechanics*
Charles Earl Bradbury, B.P., *Instructor in Art and Design*
Abner Richard Knight, M.E., *Instructor in Electrical Engineering*
Roger Sherman Loomis, B.Lit., A.M., *Tutor in English*
Charles Henry Hecker, Ph.D., *Instructor in Chemistry*
Anna Viola Simon, *Instructor in Voice*
Arthur Grenville Eldredge, *Instructor in Photography and Director of the Photographic Laboratories*
Gustave Adolph Gross, *Instructor in Pattern Making*
Robert Douglas Glasgow, Ph.D., *Instructor in Entomology*
Alexander Green, Ph.D., *Instructor in German*
*Guy G Mills, B.S., *Instructor in Civil Engineering*
Charles Ruby Moore, B.S., *Instructor in Electrical Engineering*
Earle Stanley Alden, A.M., *Instructor in English*
Mamie Bunch, A.B., *Instructor in Household Science, in charge of Extension Work*
Alfred Copeland Callen, M.S., E.M., *Instructor in Mining Engineering*
Lynn Harold Harris, Ph.D., *Instructor in English*
Edward Otto Heuse, Ph.D., *Instructor in Chemistry*
Harold Newcomb Hillebrand, Ph.D., *Instructor in English*
Lloyd Theodore Jones, A.M., M.S., *Instructor in Physics*
Horatio Sprague McDewell, B.S., M.E., *Instructor in Mechanical Engineering*
Harrison McJohnston, A.M., *Instructor in Business English and Salesmanship*
Clyde Ross Newell, Ph.B., M.S., *Instructor in Farm Mechanics*
Hubert Leonard Olin, Ph.D., *Instructor in Chemistry*
Edith Griffith Osmond, A.B., B.S., *Instructor in Physical Training for Women*
Frank Ashmore Pearson, B.S., *Instructor in Dairy Husbandry*
George Wallace Sears, Ph.D., *Instructor in Chemistry*
Joel Andrew Sperry, Ph.D., *Instructor in Bacteriology*
Russell McCulloch Story, A.M., *Instructor in Political Science*
Ralph Earle Tieje, A.M., *Instructor in English*
Frederick Calkins Torrance, M.E., *Instructor in Mechanical Engineering*
Robert Calvin Whitford, A.M., *Instructor in English*
Anna Waller Williams, A.M., *Instructor in Household Science*
Arthur Edwards Williams, B.S., *Instructor in Ceramics*
John Williams Davis, M.E., *Instructor in Electrical Engineering*
Ralph Stanley Fanning, B.Arch., *Instructor in Architectural Design*
William Dewey Foster, M.S., *Instructor in Architectural Design*
Jessie Yereance Cann, Ph.D., *Instructor in Chemistry*
William Sidney Wolfe, M.S., *Instructor in Architectural Engineering*
Edwin Frank, B.S., *Instructor in Mechanical Engineering*
James Burton Andrews, B.S., *Instructor in Animal Husbandry*
Frederick Nobel Evans, A.B., M.L.A., *Instructor in Landscape Gardening*
Carl Sawyer Downes, Ph.D., *Instructor in English*
Greta Gray, A.M., *Instructor in Household Science*
Margaret Beaumont Stanton, B.S., A.M., *Instructor in Household Science*

*Second semester.

William James Putnam, B.S., *Instructor in Theoretical and Applied Mechanics*
Elmer Roberts, B.S., *Instructor in Genetics*
James Harvey Hogue, *Instructor in Foundry Practise*
Russell Osborne Stidston, Ph.D., *Instructor in English*
*Homer Blosser Reed, Ph.D., *Instructor in Psychology*
†Carl Rahn, Ph.D., *Instructor in Psychology*
Sidney Casner, A.B., *Instructor in Physical Training for Men*

ASSISTANTS

James Merion Duncan, *Assistant in Pattern Making*
Sada Annis Harbarger, A.M., *Assistant in English*
Ruth Kelso, A.M., *Assistant in English*
Elizabeth Parnham Brush, A.M., *Assistant in History*
Bessie Rose Green, A.M., *Assistant in Zoology*
Rosalie Mary Parr, A.M., *Assistant in Botany*
Peter Joseph Rebman, *Assistant in Forge Shop*
Lloyd Theodore Jones, A.M., *Assistant in Physics*
Walter Albert Buchen, A.M., *Assistant in English*
Oliver Arnold Keller, B.S., *Assistant in Dairy Manufactures*
Wilford Stanton Miller, A.M., *Assistant in Education and Secretary of the School of Education*
Oscar Alan Randolph, M.S., *Assistant in Physics*
Orr Milton Allyn, B.S., *Assistant in Crop Production*
Wilbur Jerome Carmichael, B.S., *Assistant in Animal Husbandry*
John Alexander Frisk, *Assistant in Mechanical Engineering and Mechanician in the Mechanical Engineering Laboratory*
Rosa Lee Gaut, B.Mus., *Assistant in Physical Training for Women*
Clarence Mark Hebbert, B.S., *Assistant in Mathematics*
Ralph R Jones, *Assistant in Physical Training for Men*
Oliver Kamm, Ph.D., *Assistant in Chemistry*
Alvah Peterson, A.M., *Assistant in Entomology*
John William Read, M.S., *Assistant in Chemistry*
Earle Horace Warner, A.M., *Assistant in Physics*
John Jonathan Yoke, B.S., *Assistant in Animal Husbandry*
Bert Stover Davisson, A.M., *Assistant in Chemistry*
Emerson Grant Sutcliffe, A.B., *Assistant in English*
Lew R Sarett, A.B., *Assistant in Public Speaking*
Bronislav Roman Honovski, Ph.D., *Research Assistant in Chemistry*
Conrad Joseph Eppels, *Assistant in Romance Languages*
Sebastian Karrar, A.M., *Assistant in Physics*
Jonas Bernard Nathanson, A.M., *Assistant in Physics*
Benjamin Lester Bowling, *Assistant in the Cement Laboratory*
Lawrence Vreeland Burton, B.S., *Assistant in Bacteriology*
Charles Serophin Carry, *Assistant in Romance Languages*
Joseph Harvey Checkley, B.S., *Assistant in Agricultural Extension*
Arthur Samuel Colby, B.S., *Assistant in Pomology*
Harvey Peach Corson, M.S., *Assistant in Sanitary Chemistry and Chemist and Bacteriologist in the State Water Survey*
Edgar Wallace Engle, B.S., *Assistant in Chemistry*

*First semester.
†Second semester.

Harrison Fred Theodore Fahrnkopf, B.S., *Assistant in Soil Fertility*
Harry Charles Gilkerson, B.S., *Assistant in Soil Fertility*
Harry Virl Heimburger, A.B., *Assistant in Zoology*
Raymond Washington Hess, A.M., *Assistant in Chemistry*
Ernest Michael Rudolph Lamkey, A.B., *Assistant in Botany*
Ralph Harlan Linkins, A.B., *Assistant in Zoology*
William Pitt Miller, B.S., *Assistant in Agricultural Extension*
Alma Jessie Neill, A.B., *Assistant in Physiology*
Charles Ivan Newlin, B.S., *Assistant in Animal Husbandry*
Clarence Samuel Ross, A.B., *Assistant in Geology*
Guy Watson Smith, M.S., *Assistant in Mathematics*
Howard John Snider, B.S., *Assistant in Soil Fertility*
Thomas Blaine Stanley, A.B., *Assistant in English*
Scott Champlin Taylor, B.S., *Assistant in Chemistry*
Harry Dwight Waggoner, A.B., *Assistant in Botany*
Edward Harvey Walworth, B.S., *Assistant in Crop Production*
Thor Griffith Wesenberg, A.M., *Assistant in Romance Languages*
Ernest Atkins Wildman, B.S., *Assistant in Chemistry*
William Wodin Yapp, B.S., *Assistant in Dairy Husbandry*
Adolf Eduard Zucker, A.M., *Assistant in German*
Warren Rippey Schoonover, B.S., *Assistant in Soil Fertility*
Henry Charles Zeis, A.B., *Assistant in Mathematics*
Anna Sue Hughitt, *Assistant in Physical Training for Women*
*Dorothy Ruth Shoemaker, A.B., *Assistant in Physical Training for Women*
Alfred Chester Hanford, A.M., *Assistant in Political Science*
George Washington Spindler, A.M., *Assistant in German*
Louis Allen, A.B., *Assistant in Romance Languages*
Franz August Aust, M.S., *Assistant in Landscape Design*
Raymond Ephraim Dixon, A.M. *Assistant in English*
Earle Robinson Math, B.S., *Assistant in Architectural Construction*
Harry Montgomery Weeter, A.B., *Assistant in Dairy Husbandry*
Paul Anders, *Assistant in Glass Blowing*
Ralph Edward Muehlman, *Assistant in Architecture*
Theodore Rolly Ball, M.S., *Assistant in Chemistry*
Paul Levern Bayley, A.M., *Assistant in Physics*
Clyde Byron Beck, A.B., *Assistant in English*
Ernest Edward Charlton, A.B., *Assistant in Chemistry*
Nora Elizabeth Dalbey, A.M., *Assistant in Botany*
Ralph Raymond Danielson, B.S., *Assistant in Ceramics*
Juanita Elizabeth Darrah, A.B., *Assistant in Chemistry*
Joseph Edgar DeCamp, Ph.D., *Assistant in Psychology*
William Henry Dreesen, A.B., *Assistant in Economics and Commerce*
Henry Mathusalem DuBois, A.M., *Assistant in Geology*
Carl Herman Haessler, A.B., *Assistant in Philosophy*
Henry Horace Hibbs, Jr., A.M., *Assistant in Sociology*
Robert Maurice Husband, *Assistant in General Engineering Drawing*
William Henry Hyslop, A.M., *Assistant in Physics*
Forrest Ellwood Kempton, M.S., *Assistant in Botany*
Charles Kelley Knight, A.M., *Assistant in Economics*

*First semester.

Harry Cleveland Kremers, A.B., *Assistant in Chemistry*
William Asbury Manuel, A.B., *Assistant in Chemistry*
Robert Haskell Marshall, A.B., *Assistant in Mathematics*
Henry Gustav May, B.S., *Research Assistant in Zoology*
Jay Earll Miller, LL.B., A.M., *Assistant in History*
Elmore Petersen, AB., B.Com., *Assistant in Economics*
Bert Edwin Quick, A.B., *Assistant in Botany*
Mason Kent Read, B.S., *Assistant in Geology*
Edwin Arthur Rees, A.M., *Assistant in Chemistry*
Howard Dewitt Valentine, B.S., *Assistant in Chemistry*
Edward Wichers, A.B., *Assistant in Chemistry*
William Harold Wilson, A.M., *Assistant in Mathematics*
Joseph Charles Winslow, A.B., *Assistant in Bacteriology*
Edward Laurence McKenna, A.M., *Assistant in Economics*
Charles Francis Hill, A.B., *Assistant in Physics*
William Barber Nevens, B.S., *Assistant in Dairy Husbandry*
James Kessler, A.B., *Assistant in Romance Languages*
Margaret Vara Cobb, A.M., *Assistant in Education*
James Howard Hanger, A.M., *Assistant in Education*
Cyrus William Lantz, A.M., *Assistant in Botany*
Herbert Wordwell Blaney, B.S., M.L.A., *Assistant in Landscape Extension*
Howard Dexter Brown, B.S., *Assistant in Olericulture*
Edwin Deal, B.S., *Assistant in Landscape Extension*
Duane Taylor Englis, A.M., *Assistant in Floricultural Chemistry*
Claude Harper, B.S., *Assistant in Animal Husbandry*
August George Hecht, B.S., *Assistant in Floriculture*
Lee Ellis Miles, A.B., *Assistant in Floriculture*
*Anton Prasil, B.S., *Assistant in Animal Chemistry*
Alexander Felix Samuels, A.B., *Research Assistant in Astronomy*
John Raymond VanKleek, B.S., M.L.D., *Assistant in Landscape Extension*
James Wilbur Whisenand, B.S., *Assistant in Animal Husbandry*
James Manley Phelps, A.B., *Assistant in Public Speaking*
James Storer, A.M., *Assistant in Geology*
William Macy Stanton, M.S., *Assistant in Architecture*
Nathan Cesna Grimes, A.M., *Assistant in Mathematics*
Ross Earley Gilmore, A.M., *Assistant in Chemistry*
Rafael Arcangel Soto, B.S., *Assistant in Romance Languages*
Clarence Allen Atwell, B.S., *Assistant in General Engineering Drawing*
Henry Joseph Weiland, B.S., *Research Assistant in Chemistry*
Charles West Redwood, *Scientific Artist in Zoology*
Alma Penrose, A.B., *Reviser in Library Science*
Paul William Allen, M.S., *Assistant in Dairy Bacteriology*

GRADUATE ASSISTANTS

Homer Eldon Chenoweth, A.B., *Graduate Assistant in Zoology*
Stewart Dent Marquis, A.B., *Graduate Assistant in Chemistry*
Everett Harvey Taylor, A.B., *Graduate Assistant in Chemistry*
Ralph Waldo Tippet, A.B., *Graduate Assistant in Chemistry*
Reuben Winfield Allen, M.S., *Graduate Assistant in Chemistry*
Clarence Barbre, B.S., *Graduate Assistant in Chemistry*

*Resigned, November 21, 1914.

Rachel Ann Baumgartner, A.B., *Graduate Assistant in Zoology*
Don Warren Bissell, B.S., *Graduate Assistant in Chemistry*
Silas Alonzo Braley, A.B., *Graduate Assistant in Chemistry*
Jesse LeRoy Conel, A.M., *Graduate Assistant in Zoology*
Carl Nathan Davidson, A.B., *Graduate Assistant in Chemistry*
Robert Lesley Davis, B.S., *Graduate Assistant in Botany*
Paul Marshall Dean, A.M., *Graduate Assistant in Chemistry*
Jay Thomas Ford, A.B., *Graduate Assistant in Chemistry*
Henry Lester Gerry, A.M., *Graduate Assistant in Chemistry*
George Marsh Higgins, B.S., *Graduate Assistant in Zoology*
Axel Magnus Hjort, A.B., *Graduate Assistant in Chemistry*
Walter Gerald Karr, B.S., *Graduate Assistant in Chemistry*
Henry Rhodes Lee, A.B., *Graduate Assistant in Chemistry*
Harold Dean Leslie, A.B., *Graduate Assistant in Economics*
James Burleigh Lucas, M.S., *Graduate Assistant in Chemistry*
Thomas Byrd Magath, M.S., *Graduate Assistant in Zoology*
Harriett Bell Merrill, M.S., *Graduate Assistant in Zoology*
Herbert Edmond Metcalf, B.S., *Graduate Assistant in Zoology*
William Eugene Pickler, A.B., *Graduate Assistant in Botany*
Anna Sophie Rogers, A.M., *Graduate Assistant in Psychology*
Albert Durand Shepard, B.S., *Graduate Assistant in Chemistry*
Glenn Seymour Skinner, A.B., *Graduate Assistant in Chemistry*
Ernest Henry Vollweiler, A.B., *Graduate Assistant in Chemistry*
Terrence Onas Westhaefer, A.B., *Graduate Assistant in Chemistry*

STUDENT ASSISTANTS

Henry Charles Eckstein, *Student Assistant in Chemistry*
John Moller Janson, *Student Assistant in Chemistry*
George Benjamin Ruby, *Student Assistant in Chemistry*
Everett Robert Brunskill, *Student Assistant in Chemistry*
Clarence W. Burkhart, *Student Assistant in Chemistry*
E. M. A. Chandler, *Student Assistant in Chemistry*
Fred H. Eldred, *Student Assistant in Chemistry*
Frank Footitt, *Student Assistant in Chemistry*
Arthur Ferdinand Hakanson, *Student Assistant in Chemistry*
William Durrell Hatfield, *Student Assistant in Chemistry*
Sidney Marion Hall, *Student Assistant in Chemistry*
Mabel Jackson, *Student Assistant in Physical Training*
Henry Rhodes Lee, *Student Assistant in Chemistry*
Clarence Edgar Sims, *Student Assistant in Chemistry*

ASSISTANTS IN MILITARY SCIENCE

Walter Clark Armstrong, *Assistant in Military Science*
Harold Edward Barden, *Assistant in Military Science*
Edward Charles Elles, *Assistant in Military Science*
Joseph Nathaniel Greene, *Assistant in Military Science*
Augustus Henry Grunewald, *Assistant in Military Science*
Joseph Columbus Hostetler, *Assistant in Military Science*
Clifford F. Hood, *Assistant in Military Science*
Lloyd Dunaway Knapp, *Assistant in Military Science*
Roe Niver, *Assistant in Military Science*
Ernest Howard Pool, *Assistant in Military Science*

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GRACE ADELAIDE ENGLAND, A.B., *General Assistant*
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FRANCIS KEESE WYNKOOP DRURY, A.M., B.L.S., *Assistant Librarian*
CHARLES EDWARD GRAVES, A.B., *Exchange Assistant*
AURELLA KNAPP, A.B., B.L.S., *Order Assistant (Periodicals)*
MYRTLE ANNA RENZ, B.L.S., *Order Assistant*
CLARA AGNES RICKETTS, A.B., B.L.S., *Order Assistant*
Loan Department—
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STELLA BELLE GALPIN, A.B., B.L.S., *Loan Assistant*
SARAH ELIZABETH BRYAN, A.B., B.L.S., *Loan Assistant*
VIOLA FRASER, A.B., *Loan Assistant*
INA MAY BROWN, *Loan Assistant*
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ADAH PATTON, B.L.S., *Classifier*
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ANTOINETTE HELEN GOETZ, A.B., *Catalog Assistant*
*EDITH EMIGH, *Catalog Assistant*
LILLA M. ALEXANDER, *Catalog Assistant*
FANNIE DUNLAP, Ph.B., *Catalog Assistant*
BERTHA LEE SHARP, A.B., *Catalog Assistant*
AMANDA M. FLATTERY, A.M., *Catalog Assistant*
ZELIAETTE TROY, A.B., *Catalog Assistant*
MINNIE JOANNA BOLLMAN, A.B., *Catalog Assistant*
MARGARET WILLIAMS, A.B., *Catalog Assistant*
ELSIE BAECHTOLD, A.B., *Catalog Assistant*
NELLIE READ ROBERTS, A.B., *Catalog Assistant*
NELLE SIGNOR, A.B., *Catalog Assistant*
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ALICE SARAH JOHNSON, A.B., B.L.S., *Reference Assistant*
EMMA FELSENTHAL, Ph.B., B.L.S., *Reference Assistant*
MARGARET HUTCHINS, A.B., B.L.S., *Reference Assistant*

*Resigned, December 31, 1914.

Departmental Libraries—

Mary Torrance, A.B., B.L.S., *Assistant in Classics*
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PART I
GENERAL INFORMATION

LOCATION

The University of Illinois is situated in Champaign County, about fifty miles northeast of the geographical center of the State. It is 126 miles south of Chicago, 118 miles west of Indianapolis, 164 miles northeast of St. Louis.

The campus of the University lies just within the corporate limits of the city of Urbana and is bounded on the west by the city of Champaign. These two municipalities form in fact one community of about twenty-four thousand inhabitants. The city halls of the two towns are about two miles apart, the campus half way between. The railway, express, telegraph, and telephone services of both cities are, therefore, equally available for the University. Mail for the institution itself should be directed to Urbana to insure prompt delivery. The Urbana postoffice maintains a sub-station at the University, located in the Library Building.

Urbana-Champaign

The cities of Urbana and Champaign are in the heart of the "Corn Belt" and form the business and social center of a rich farming community.

Both cities are well paved, well drained, and provided with good water supply. In matters pertaining to health, conditions are excellent. There is a hospital within three blocks of the campus, in which students may be cared for at moderate expense.

The University has no dormitories, but the number of boarding houses is large, and there are forty-two residence halls erected by fraternities, sororities, and local clubs. The material needs of the student body are, therefore, provided for.

The moral and religious conditions of the University community are favorable to the welfare of the students. There are thirty churches, representing eleven denominations, and a number of students' religious associations, leagues, and guilds, including strong Young Men's and Young Women's Christian Associations.

Under a special State law, the liquor traffic has been barred from all territory within a radius of four miles from the University.

Railway Connections

The University is connected with neighboring cities in Illinois, including Bloomington, Danville, Decatur, Peoria, and Springfield, and also with St. Louis, by the electric interurban lines of the Illinois Traction System. It will shortly be connected by other interurban lines with Kankakee and Chicago.

It may be reached from Chicago and the north and from points in the south by the Illinois Central Railroad (time from Chicago by express trains, three hours and ten minutes), being on the direct line from Chicago to Cairo and New Orleans. It is joined to the east and the west by the Peoria & Eastern Division of the "Big Four" Route (Cleveland, Cincinnati, Chicago & St. Louis Railway), as well as by the division of the Wabash Railway which

connects Kansas City and St. Louis with Detroit and Buffalo. It is also reached from the west by the Havana branch of the Illinois Central Railroad and from Decatur by another branch of the same system.

The time from New York by way of the Wabash and "Big Four" routes is twenty-six hours, by way of Chicago and the Illinois Central, twenty-four hours. Washington and Philadelphia are about equally distant in time. Pittsburg, Buffalo, Kansas City, and Omaha may be reached in fifteen, fourteen, thirteen, and seventeen hours respectively.

The station of the Illinois Central Railroad is in Champaign. The Wabash and "Big Four" have stations in both Champaign and Urbana. These several stations are each a little more than a mile distant from the University campus. There are several hotels in Champaign and Urbana within easy reach of the University, the Beardsley in Champaign and the Columbian in Urbana being the largest.

HISTORY

1862. The Morrill Land Grant

By this act the national government donated to each state in the Union public land scrip, in quantity equal to 30,000 acres for each senator and representative in Congress, "for the endowment, support, and maintenance of at least one college, whose leading object shall be, without excluding other scientific and classical studies, and including military tactics, to teach such branches of learning as are related to agriculture and the mechanical arts, * * * * in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions of life."

On account of this grant the State pays the University, semi-annually, interest at the rate of five per cent on about $610,000 and deferred payments on land contracts amounting approximately to $35,000.

Location chosen

To secure the location of the University several counties entered into competition by proposing to donate to its use specified sums of money or their equivalent. Champaign County offered a large brick building in the suburbs of Urbana, erected for a seminary and nearly completed, about 1,000 acres of land, and $100,000 in county bonds. To this the Illinois Central Railroad added $50,000 in freight.

1867. Incorporation

The institution was incorporated February 28, 1867, under the name of the Illinois Industrial University. It was placed under the control of a Board of Trustees, consisting of the Governor, the Superintendent of Public Instruction, and the President of the State Board of Agriculture, *ex officio* members, and twenty-eight citizens appointed by the Governor. The chief executive officer was called the Regent, and was made an *ex officio* member of the Board and the presiding officer of both the Board of Trustees and the Faculty. (See also 1873 and 1887 below.)

1867. Dr. Gregory Regent

On March 12, 1867, John Milton Gregory, LL.D., was elected Regent of the University. On April 1, 1867, Dr. Gregory accepted the position and entered upon his duties. He served as Regent until September 1, 1880.

1868. The University opened

The University opened on March 2, 1868. The number of students enrolled was about fifty; the faculty consisted of the Regent and two professors. During the first term another instructor was added, and the number of students increased to 77—all young men.

During the first term instruction was given in algebra, geometry, physics, history, rhetoric, and Latin. Work on the farm and gardens or about the buildings was at first compulsory for all students. In March of the next year, however, compulsory labor was discontinued, save when it was to serve as a part of instruction.

1868-9. The first laboratories

During the autumn of 1868 a chemical laboratory was fitted up; and laboratory work in botany was begun the following year.

1870. Pioneer shop instruction

In January, 1870, a mechanical shop was fitted up with tools and machinery, and here was begun the *first shop instruction* given in any American university. In the summer of 1871 the Wood Shops and Testing Laboratory (burned on June 9, 1900) were erected and equipped for students' shop work in both wood and iron.

1870. Women admitted

On March 9, 1870, the Trustees voted to admit women as students. In the year 1870-71 twenty-four availed themselves of the privilege. Since that time they have constituted from one-sixth to one-fifth of the total number of students.

1873. First reorganization of the Board of Trustees

At this time the number of members was reduced from thirty-two (see 1867 above) to eleven—the Governor and the President of the State Board of Agriculture, *ex officio,* and nine others, who were still appointed by the Governor. Beginning at this time also, the President of the Board has been chosen by the members from among their own number for a term of one year. (See also 1887 below.)

1877. Authority to confer degrees received

According to the original State law, the usual diplomas and degrees could not be granted by the University; certificates showing the studies pursued and the attainments in each were given instead. The certificates proved unsatisfactory to the holders, and in 1877 the legislature gave the University authority to confer degrees and issue diplomas.

1880-81. Dr. Peabody Regent

In June, 1880, Regent Gregory's resignation was accepted to take effect September 1, 1880, and Selim Hobart Peabody, A.B., Ph.D., Professor of Mechanical Engineering and Physics, was made Regent *pro tempore.* At the next annual meeting, in March, 1881, he was elected Regent.

1885. Change of name

In this year the General Assembly changed the name of the institution from the *Illinois Industrial University* to the *University of Illinois.*

1885. The State Laboratory of Natural History transferred to the University

See page 430.

1887. Second reorganization of the Board of Trustees

In 1887 a law was passed making membership in the Board elective, at a general State election, and restoring the Superintendent of Public Instruction as an *ex officio* member. There are now, therefore, three *ex officio* and nine elective members. (For the previous organization of the Board see 1867 and 1873 above.)

1887. The Agricultural Experiment Station established at the University

See page 425.

1890. Additional Federal endowment

In 1890 the Congress of the United States made further appropriations for the endowment of the institutions founded under the act of 1862. Under this

enactment each such college or university received the first year $15,000, the second year $16,000, and in each succeeding year a sum larger by $1,000 than the amount of the preceding year, until the amount reached $25,000; this sum was to be paid yearly thereafter.

1891. Dr. Burrill Acting Regent

In June, 1891, Regent Peabody's resignation was accepted, to take effect September 1, and in August Thomas Jonathan Burrill, A.M., Ph.D., Professor of Botany and Horticulture, was appointed Acting Regent. Dr. Burrill served in this capacity until September, 1894.

1892. The Graduate School

Beginning with this year, graduate work was undertaken under the name of the Graduate School, but without the organization of a separate faculty.

1894. The Summer Session

The first Summer Session of the University was authorized by a vote of the Trustees on March 13, 1894, and was opened in June of that year.

1894. Dr. Draper President

On April 13, 1894, Andrew Sloan Draper, LL.D., was elected Regent. He accepted May 10, 1894. On August 1 his title was changed to President. Dr. Draper entered upon his duties on August 1, 1894. He served until June, 1904.

1896. The School of Pharmacy

On May 1, 1896, the Chicago College of Pharmacy, founded in 1859, became the School of Pharmacy of the University of Illinois.

1897. The College of Medicine

Negotiations looking to the affiliation of the College of Physicians and Surgeons of Chicago with the University, which had been going on for several years, were concluded by the Board of Trustees March 9, 1897. Accordingly, the College of Physicians and Surgeons became, on April 21, 1897, the College of Medicine of the University of Illinois. (The College of Medicine was discontinued on June 30, 1912, but was re-opened on February 12, 1913.)

1897. The School of Music

By vote of the Trustees on June 9, 1897, the department of music, which had been reorganized and enlarged in 1895, was erected into the School of Music, with a separate faculty and organization.

1897. The State Water Survey authorized

See page 432.

1897. The Library School

In 1897 the School of Library Economy, which had been established in 1893 at the Armour Institute of Technology in Chicago, was transferred to the University, the Director of that school was appointed Librarian of the University Library, and the Library School was opened.

1897. The College of Law

Pursuant to an action of the Board of Trustees, taken December 8, 1896, the School of Law was organized, and was opened September 13, 1897. The course of study covered two years, in conformity with the then existing requirements for admission to the bar of Illinois. In the following November, however, the Supreme Court of the State announced rules relating to examina-

tions for admission to the bar which made three years of study necessary, and the course of study in the Law School was immediately rearranged on that basis. On February 9, 1900, the name of the School of Law was changed, by vote of the Board of Trustees, to *College of Law.*

1899. The State Entomologist's Office permanently established at the University

See page 431.

1900. Courses in Business Administration

In 1900 the General Assembly made an appropriation for the establishment of courses of training for business life, and, in accordance with that action, the Trustees approved the organization of the Courses in Business Administration.

1901. The College of Dentistry

In accordance with an action taken by the Board of Trustees on March 12, 1901, a School of Dentistry was organized as a department of the College of Medicine. The School was opened October 3, 1901. The name was changed to *College of Dentistry* on April 27, 1905. (The College of Dentistry was discontinued on June 30, 1912, but was re-opened on October 1, 1913.)

1903. The Board of Examiners in Accountancy created

See page 435.

1903. The Engineering Experiment Station established

See page 428.

1904. Dr. James President

On March 9, 1904, President Draper's resignation was accepted, to take effect July 1. On August 23, 1904, Edmund Janes James, Ph.D., LL.D., was elected President. He accepted on August 26, 1904, and entered upon his duties in the fall of that year.

1905. The School of Education

By a vote of April 27, 1905, the Board of Trustees established the School of Education, to provide for the professional training of teachers.

1905. The State Geological Survey established

See page 433.

1906. Adams Fund

This fund was created by an act of Congress dated March 16, 1906, and provides for an appropriation of $5,000 for the year ending June 30, 1906, and an increase of $2,000 a year for five years. The present appropriation to the University under the Adams Act is, therefore, $15,000 a year. Its use is limited to the necessary expenses of original research and experimental work in agriculture.

1907. Nelson Fund

This fund was created by an act of Congress dated March 4, 1907, and carried with it an appropriation of $5,000 for the fiscal year ending June 30, 1908, and an annual increase of $5,000 for four years. The present appropriation to the University under the Nelson Act is, therefore, $25,000 per year. Its uses are identical with those of the Morrill Fund.

1906-7. The School of Railway Engineering and Administration

On January 30, 1906, the Board of Trustees created in the College of Engineering a department of railway engineering; on January 22, 1907, supple-

menting that action, it established the School of Railway Engineering and Administration.

1906-7. The Graduate School organized as a separate faculty

The General Assembly appropriated $50,000 for the Graduate School, and the Executive Faculty of that school was organized.

1909. A Mine Rescue Station established at the University

See page 436.

1911. The Mill Tax

The General Assembly passed a law providing that in the year 1912, and annually thereafter, the proceeds of a tax of one mill for each dollar of the assessed valuation of the taxable property of the State should be set apart as a fund for the maintenance of the University.

1912. The Colleges of Medicine and Dentistry discontinued

The Colleges of Medicine and Dentistry were discontinued on June 30, 1912.

1913. The Colleges of Medicine and Dentistry reopened

On February 12, 1913, the Board of Trustees accepted the gift of the capital stock of the College of Physicians and Surgeons, donated to the University by the alumni and other friends of medical education in Chicago, and the College of Medicine was reopened.

The College of Dentistry was reopened on October 1, 1913.

1913. The College of Liberal Arts and Sciences

In this year the College of Literature and Arts and the College of Science were united to form the College of Liberal Arts and Sciences.

1913. Miners' and Mechanics' Institutes established

See page 438.

EQUIPMENT

BUILDINGS AND GROUNDS

The land occupied by the University and its several departments embraces 300 acres, besides a farm of 800 acres. There are at the present time some forty-five buildings on the campus.

Liberal Arts Group

University Hall (erected 1873) is the "old main building" of the University. It occupies three sides of a quadrangle, and is five stories in height. It is devoted to class rooms and offices.

Lincoln Hall (erected 1911) has a frontage of 230 feet. The exterior is brick, stone, and terra cotta. This building provides for the advanced work of the departments of the classics, English, Romance languages, Germanic langauges, history, economics, education, political science, sociology, and philosophy. The first three floors provide, in addition to the ordinary class and consultation rooms, seminar libraries and conference rooms. On the fourth floor are research rooms and two museums, the Museum of Classical Art and Archeology, and the Museum of European Culture.

The Commerce Building (erected 1912) is a fireproof building three stories high, 153 feet on the front and 60 feet deep, with a one-story annex containing a lecture room 48 feet square. The building has a total floor area of about 29,000 square feet and is to house the work in business administration with its various class rooms, offices, and laboratories. The exterior first story finish is buff Bedford stone; the second and third stories are of brick with carved stone trimmings and cornice. The roof is of tile, and the interior trim is of dark oak throughout.

An addition to the Commerce Building, under construction. This fireproof structure, three stories high, 109 by 153 feet, will house the offices of the President, Registrar, Comptroller, Dean of Men, Supervising Architect, and others. The material and finish are like those of the Commerce Building.

General Science Group

Natural History Hall (old part erected 1892; addition 1909) is the largest building on the campus, covering a ground area 135 feet by 275 feet. It is occupied by the departments of botany, entomology, zoology, physiology, geology, and mathematics, together with the offices and equipment of the State Geological Survey, and the State Natural History Survey, and the office of the State Entomologist. The offices of the President, the Registrar, and the Dean of Men, and the Business Office, are also housed in this building. A fireproof museum 51 feet by 63 feet in size, equipped with fireproof and dustproof cases, occupies the center of the building.

The Laboratory of Physics (erected 1909) is a three-story fireproof brick building trimmed with Bedford limestone. The length is 178 feet and the depth of the wings is 125 feet. The large lecture room has a seating capacity

of two hundred sixty-two. A one-story annex, 78 by 28 feet, contains the ventilating and heating fans and the machine shop of the department. The total available floor area, exclusive of the basement, is about 60,000 square feet. The large laboratories and the recitation rooms are mostly in the west wing. The east wing is of heavy construction and contains about thirty smaller laboratories for advanced experimental work. The blue print department of the University occupies rooms on the top floor of the building. Gas, distilled water, compressed air and vacuum, and direct and alternating electric currents of a wide range in amperes and in volts are available in all parts of the building.

The Chemical Laboratory (erected 1901-2) is a three-story building, the ground plan of which is shaped like the letter E. The extreme dimensions are 230 feet along the front and 116 feet along the wings. The middle rear wing contains the lecture amphitheater, which seats 390. The end wings contain the general laboratories. The central part of the building is occupied by offices, museum, class and seminar rooms, supply rooms, and a number of special rooms for research work. There is a basement, which contains the ventilating plant and rooms for assaying and metallurgy. In this building are located also the general office and laboratories of the State Water Survey.

An addition to the Chemical Laboratory is in process of construction. When completed this will give a building in the form of a hollow square in which there will be 164,000 square feet of usable space, more than twice the space of the present laboratory. The addition is to be built with fireproof construction and will be equipped to provide for instruction in all lines of chemistry.

The Astronomical Observatory (erected 1896) is a brick building with extreme dimensions of 75 by 55 feet. It has three wings and is surmounted by a dome 25 feet in diameter. An adjacent building with a 15-foot dome was erected in 1914.

The Ceramics Laboratory (erected 1910) is a two-story brick building in which are provided a general laboratory, plaster room, pottery room, machine room, drawing room, library, recitation rooms, chemical laboratory, and office. (See also the Mining and Ceramics Laboratory under "Engineering Group" below.)

The Entomology Building (erected 1905 for the use of the State Entomologist and his staff) is a two-story building 48 by 20 feet, with basement storerooms, and with two insectary wings of greenhouse construction, each 25 by 20 feet. It contains the office of horticultural inspection, a stenographer's room, rooms for the assistant inspectors and insectary assistants, and a large fireproof vault. The glass-covered wings are equipped for experimental entomology and life-history studies.

The Botany Annex (erected 1914) is a greenhouse laboratory covering 5,000 square feet of ground, divided into compartments that are severally provided with devices for controlling humidity and temperature within close limits so as to make exact experimentation possible in the fields of plant physiology and pathology. To this laboratory is attached a reconstructed two-story dwelling, giving working and class rooms for use in connection with the experiments conducted under glass.

The Ecological Laboratory (remodeled and reconstructed in 1914 from a residence at 1210 Springfield avenue) is equipped for the experimental study of the relations of animals to environment.

Engineering Group

Engineering Hall (erected 1894) is a four-story building, with a frontage of 200 feet, a depth of 76 feet on the wings and 138 feet on the center, and a floor area of 47,000 square feet. The first and second floors are occupied by the offices, the recitation rooms, and the instrument and drafting rooms of the departments of civil engineering and municipal and sanitary engineering. The engineering lecture room, on the second floor, has a seating capacity of two hundred twenty-five. The third floor is occupied by the offices of the Dean of the College of Engineering and Director of the Engineering Experiment Station, and by the office, recitation, and drafting rooms of the department of mechanical engineering. A portion of the third floor and all of the fourth is occupied by the department of architecture.

The Electrical Engineering Laboratory (erected 1898) is a two-story brick building with floor area of 18,000 square feet. The basement contains the departmental shop, the storage battery room, the electric furnace room, and rooms for electrical research. The first floor contains the undergraduate laboratory, the instrument room, the high potential laboratory, and the drafting, lecture, and recitation rooms. The second floor contains the photometric laboratory, the offices, the departmental library, and a room used by the Electrical Engineering Society.

The Mechanical Engineering Laboratory (erected 1905) is a brick building with a frontage of 120 feet, a total depth of 182 feet, and a floor area of 24,000 square feet. The front section is two stories high, and contains offices, lecture and computation rooms, and an instrument room. Back of this are three bays. The middle bay is provided with a concrete testing floor and a 10-ton three-motor traveling crane of 38-foot span. The north bay contains a 5-ton traveling crane and is used for laboratory work in connection with the departments of civil engineering and theoretical and applied mechanics.

The Laboratory of Applied Mechanics (erected 1901-2) is a brick building having a floor area of 16,000 square feet. The front part contains the materials testing laboratory, and the rear wing contains the hydraulics laboratory.

The Mining and Ceramics Laboratory (erected 1912) is a one-story building with a floor area of 11,200 square feet. It contains a kiln room for the department of ceramics, having an area of 4,300 square feet, a mining engineering laboratory of 3,600 feet area, and a chemical laboratory for the department of mining engineering. There are also offices and class rooms for the department of ceramics and a Mine Rescue Station equipped and arranged for training men in the methods of mine rescue work.

The Locomotive Testing Laboratory (erected 1912) is a fireproof building with brick walls 117 feet long and 42 feet wide, connected by a spur with the Illinois Traction System tracks. It houses a locomotive testing plant, which consists of supporting wheels on which rest the drivers of the locomotive to be tested, a dynamometer to which the locomotive drawbar is attached, and which measures the tractive force exerted by the locomotive, water brakes for absorbing the power developed by the locomotive, and other auxiliary apparatus. The exhaust gases pass through a "transite" (or asbestos board) duct to a large fan which forces them through a reinforced concrete cinder separator; the separator removes the cinders and discharges the gases into the air through a brick stack eight feet in height.

The Transportation Building (erected 1912) is a three-story fireproof building of brick trimmed with stone. The general dimensions of the building are 65x189 feet and the total floor area is 34,225 square feet. The first and second floors of the building are occupied by the departments of railway and mining engineering, and the third floor is occupied by the department of general engineering drawing.

The Metal Shops (erected 1902) occupy a one-story brick building with a floor area of 12,000 square feet, containing four office rooms, a machine shop, and a forge shop. The machine shop is 48 by 140 feet. Power is supplied by a 20-horsepower electric motor. A 3-ton traveling crane of 10 foot span covers the center of the floor for the entire length.

The Wood Shop (erected 1901-2) and the *Foundry* (added 1904) occupy a brick building which has a floor area of 16,000 square feet. The part of the building devoted to the wood shop contains a bench room, lathe room, machine room, and various smaller rooms for lectures, exhibition purposes, etc. The part devoted to the foundry has a molding floor 35x80 feet, traversed by a 5-ton traveling crane, and a basement room for the storage of materials.

Agricultural Group

The Agricultural Building (erected 1900) consists of four separate structures, built around a court and connected by corridors. The court was enclosed in 1912 and divided into five large class rooms. The main building, three stories in height, contains offices, class rooms, and laboratories for the departments of agronomy, animal husbandry, dairy husbandry, horticulture, and veterinary science; the chemical laboratory of the Experiment Station; administration rooms; and assembly room (Morrow Hall) with a seating capacity of 500. The other three buildings are two stories high; one is for dairy manufactures, one for farm crops, and one for veterinary science and stock judging. These buildings are of stone and brick, roofed with slate, and contain 113 rooms and a total floor space of about two acres. An adjacent glass structure serves the departments of agronomy and horticulture. There are, in addition to these buildings, three dwellings, three barns, and a greenhouse.

The Agronomy Building (erected 1904-5) is 50 by 100 feet in size, of brick and slate, trimmed with stone. It contains a field laboratory for crop work in which yields of experimental plats are studied, sample seeds stored, and specimens preserved.

The Farm Mechanics Building (erected 1906-7) is a three-story brick structure, containing class rooms, offices, lecture rooms, drafting room, library, laboratories, and tool and storage rooms. The third floor, which is reached by an elevator, furnishes storage room for the greater part of $16,000 worth of farm machinery loaned the College by various manufacturing companies and used for laboratory work. The facilities afforded by this building, with its equipment, make possible the assembling, testing, and adjusting of all the important machines used in farm operations.

The Stock Pavilion (erected 1913) is a fireproof building 54 feet high on the front and 148 feet deep with circular ends 92 feet in diameter and 20 feet high. The total ground area is 30,000 square feet, and the show arena is 216 feet long and 65 feet wide. Seats of concrete provide accommodations for 2000. Arrangements are to be made providing for a division of the arena

into three parts, giving three separate judging rooms for instructional purposes. The building also contains class rooms and offices. Stabling will be provided in a separate structure. The exterior is of brick and terra cotta, renaissance in design, the frieze being enriched with medallions of animals' heads.

The Animal Husbandry Cattle Feeding Plant has a capacity for feeding 150 steers at a time. It consists of open and closed sheds with paved lots adjoining, with a storage barn 44 by 72 feet and an experimental silo.

The Beef Cattle Building (erected 1904-5) is a one-story structure of brick and slate, trimmed with stone, 217 feet across the front, with a wing at either end 33 by 49 feet; the central portion rises two stories and is used for the storage of feed. Other portions of the building are used as quarters for the breeding herd, and will accommodate about 100 head of cattle.

The Sheep Barn is a wooden structure consisting of a main barn 36 by 90 feet, and a shed, opening to the south, 25 by 100 feet in size. A 6-foot aisle, lined by pens on each side, runs through the center of the barn. This building besides accommodating the University flock is used for experimental work. Its location and construction insures dry footing and ample light and ventilation throughout the year.

Other buildings for the accommodation of live stock are the horse barn, the piggery, and two large barns on the South Farm.

The Experimental Dairy Barns (erected 1912) comprise a round barn 70 feet in diameter with a reinforced concrete silo in the center, a semi-detached rectangular structure 40 by 70 feet with a Grout silo adjacent, and a small dairy house and shop 26 by 32 feet. The barns are of frame construction on brick walls with solid floors of the mill type of construction, and contain feed rooms, hay lofts, and other accommodations for the experimental dairy herd. The dairy house is of frame construction, two stories in height, and contains office, shop, coal room, dairy room, and four sleeping rooms for employees.

The Horticulture Building (erected 1904-5) is a structure of brick and slate trimmed with stone, approximately 50 by 100 feet in size. It is used as a field laboratory for horticultural tests, and contains sorting rooms, storage rooms, and a laboratory for the mixing of spraying materials and other operations in connection with the horticultural work.

The Horticulture Greenhouse Group (erected 1912-13) includes (1) a floricultural group and (2) a vegetable and plant breeding group.

(1) *The Floriculture Greenhouse Group* (erected 1912-13) consists of a two-story and basement service building 93 by 37 feet, and the following glass structures: four houses each 105 by 28 feet, three houses each 105 by 35 feet, one corridor house 139 by 10 feet, one storage house 50 by 12 feet, and a palm house 80 by 40 feet. The service building is of hollow tile and cement construction, and contains laboratories, lecture room, herbarium room, offices, and seminar room, as well as potting, storage, and work rooms.

(2) *The Vegetable and Plant Breeding Greenhouse Group* (erected 1912-13) consists of a glass house for vegetable growing 105 by 28 feet, two houses for plant breeding each approximately 80 by 30 feet, a wire house 80 by 30 feet, and a two-story and basement service building 82 by 36 feet, containing laboratories, work rooms, class rooms, offices, and storage rooms. The type of construction of this building is the same as that of the floriculture service building.

Law Building

The Law Building (erected 1878; remodeled 1902 and 1912) is the second oldest building in the University group. It has two stories and a basement. The upper floor contains the Law Library, the students' conference room, the private offices of the members of the law faculty, and the Moot Court Room, a model court room with a seating capacity of four hundred. On the main floor are the recitation rooms, the Dean's offices, and the faculty room. In the basement are the lockers, the students' reading room, and a court room for the Law Clubs.

Buildings for General University Use

The Library Building (erected 1896-7; an addition to the stack room erected 1914) is modern Romanesque in style, is built of Minnesota sandstone, and measures 167 by 141 feet, with a tower 132 feet high. The first floor, or basement, contains the rooms of the catalog and order departments, the bound newspapers, and the University Station Postoffice. The second, or main floor, contains the general reference room, the periodical reading rooms, a small conference room, and the delivery room, which opens into the second story of the stack. The third floor contains the study room, lecture rooms, and office of the Library School, faculty study room, and the office of the librarian and assistant librarian. The five-story book stack is a rear wing to the building, separated from it by a fireproof wall. The delivery room is open to the roof and is lighted by a dome of art glass; the lunettes are decorated with frescoes symbolic of the four older colleges of the University—Literature and Arts, Science, Agriculture, and Engineering.

The Auditorium (erected 1907-8) is a brick and stone building for general meeting purposes. It contains an auditorium seating about 2,200, a memorial vestibule, and a four manual organ. All general University exercises, including convocations and the commencement gatherings, are held in this building.

The Men's Gymnasium (erected 1901) is a three-story building of stone and pressed brick, 100 by 150 feet. On the first floor there is a swimming pool, 26 feet wide, 75 feet long, and 8 feet deep at the lower end, lined with white enamel bricks. This floor contains also the general locker room, which is fitted up with all-metal lockers, and with shower bath, and steam baths; rooms for the University athletic teams; a room for visiting teams; a special dressing room for members of the faculty; and offices for the physical director and the instructors in athletics. The entire second floor is one large room, which is fitted up with all modern appliances for gymnastic exercises. The third floor contains an elevated running track, 15 laps to the mile, which is properly banked on the turns to secure the greatest speed and comfort in running.

The Armory (erected 1889-90) has a clear floor space of 15,000 square feet in one hall. It is equipped with racks for 1,200 stands of arms. An annex provides for two pieces of field artillery.

The New Armory (under construction 1913-14) comprises a drill room with a clear area 200x400 feet and a height of 98 feet at the center, the roof being carried by fourteen three-hinged steel arches. The sides are of hollow tile and the ends, supported by columns, are of steel, glass, tile, and concrete, with wood frames and sashes. The drill floor is of sufficient area to permit the maneuvering of an entire battalion of the cadet regiment. Provision has

been made for the addition of a balcony around the drill floor with seats for 3,000 and for the addition of three-story facades along the sides flanked by towers at each end. This will provide space for company rooms, locker rooms, shooting tubes, and class rooms.

The Woman's Building (erected 1905) is in the New England colonial style of architecture, of reddish brown brick, with white stone trimmings. The central part of the structure is the woman's gymnasium. On the lower floor there are swimming tank, lockers, dressing rooms, and baths. The upper floor is devoted to the main gymnasium, which is 92 by 50 feet. The north wing of the building is given to the department of household science, and the south wing provides rooms for the social life of the women students. The addition to the Woman's Building (erected 1912) is a three-story fireproof building with basement. It is 200 feet long on the front and 83 feet on each connecting wing, having 43,000 square feet of floor area. It has a large colonnade with towers on the front and two smaller colonnades on the north and south of the inner court. The addition is similar to the old building in finish and supplements the working space of the departments using it. It has two halls for literary societies and a modern flat on the upper floor, and an institutional kitchen and large dining room on the second floor. There are also offices for the Dean of Women and the Director of the Courses in Household Science, laboratories, social rooms, and space for the expansion of gymnasium work.

The President's House

The President's House (erected 1896) is a three-story frame building, in the colonial style. The first story is designed primarily for entertaining; large reception and dining parlors are so arranged as to open together into a central corridor. The second and third stories provide library and living rooms.

Service Buildings

The Central Heat and Power Plant (erected 1902; addition 1910) is 55 by 120 feet. It contains boilers aggregating 1,800 horsepower. A supplemental boiler and power plant, designed ultimately to carry the load of the present station, is equipped with boilers of 1,000 horsepower. These two stations furnish steam for heating and power to all buildings on the campus. A power plant containing a 250-kilowatt Allis-Chalmers direct connected steam engine and dynamo, a 125-kilowatt direct connected Westinghouse engine and generator, and a 100-kilowatt Curtiss turbo-generator, together with the accessories necessary to a complete power station, supplies current for light and power to all parts of the grounds. The pipe lines of the heating system and the circuits for distributing electricity are carried from the central plant to the several buildings through brick and concrete tunnels and clay and concrete conduits. Altogether there are now 6,275 feet of tunnels and 3,800 feet of conduit for the distribution of steam, and 7,000 feet of conduit for the distribution of electricity. The new boiler and power plant provides temporary quarters for the electric test car of the department of railway engineering.

The Pumping Station of the University water-works is a brick building, 38 by 73 feet, connected with the central heating station. Four 8-inch wells, 145 feet deep, and one 12-inch well 148 feet deep supply the University with water. A masonry reservoir provides for a fire-reserve supply. The pumps, tanks, and connections are arranged to give opportunities for experimental

work, and also to vary the working conditions in the adjacent hydraulics laboratory. In this building is kept the equipment of the University fire department, including an electric automatic hose and chemical wagon.

BUILDINGS IN CHICAGO

The College of Medicine Building, in which are housed all the departments except that of anatomy, is a brick and stone structure two hundred feet long by one hundred and ten feet deep and five stories high, fronting on four streets. The building contains three lecture rooms with a seating capacity of two hundred each; a clinical amphitheater with a seating capacity of over three hundred; an assembly hall with a seating capacity of seven hundred; besides recitation rooms. It also contains laboratories for physiology, chemistry, materia medica, therapeutics, and microscopical and chemical diagnosis, each accommodating from fifty to one hundred students at a time.

A three-story annex to the main building contains the laboratories used by the departments of pathology, bacteriology, and chemistry. All of these laboratories have outside light and are furnished with work tables, desks, lockers, and the necessary apparatus. There is a supply of microscopes, lenses, and oil immersions, and a projection apparatus for the illustration of lectures by means of stereopticon views.

The College of Dentistry is housed in a six-story building containing three amphitheaters, recitation rooms and lecture rooms, laboratories, dissecting rooms, a clinical operating room, and an infirmary. A parlor is provided for the use of the women students. This building adjoins that of the College of Medicine.

The School of Pharmacy leases a substantial brick structure five stories in height. It has a frontage of fifty feet on Michigan avenue and one hundred and seventy feet on Twelfth street. The School has the exclusive use of the four upper floors.

LABORATORIES

Twenty-six departments of the University are equipped with laboratories. The following list shows the buildings in which these are located:

General Science Laboratories

Botany—Natural History Hall
Ceramics—Ceramics Laboratory
Chemistry—Chemical Laboratory
Entomology—Natural History Hall
Geology—Natural History Hall
Physics—Laboratory of Physics
Physiology—Natural History Hall
Psychology—University Hall
Zoology—Natural History Hall

Engineering Laboratories

Cement—Mechanical Engineering Laboratory
Electrical Engineering—Electrical Engineering Laboratory
Founding—Wood Shop
Forging—Metal Shops

Hydraulics—Laboratory of Applied Mechanics
Locomotive—Locomotive Laboratory
Machine Construction—Metal Shops
Materials Testing—Laboratory of Applied Mechanics
Mechanical Engineering—Mechanical Engineering Laboratory
Mining—Mining Engineering Laboratory
Mine Dust and Gas—Natural History Hall
Roads—Mechanical Engineering Laboratory
Woodworking—Wood Shop

Special Research Laboratories

Agricultural Experiment Station—	Agricultural Building
Bacteriological laboratory	
Chemical laboratory	
Physical laboratory	
Geological department—	Natural History Hall
Laboratory of economic geology	
State Entomologist's Office—	Natural History Hall
State Laboratory of Natural History—	Natural History Hall
State Water Survey—	Chemical Laboratory
Laboratory for sanitary water analysis	

MUSEUMS AND COLLECTIONS

College of Liberal Arts and Sciences

Liberal Arts Group

Art.—A collection of casts, photographs, and engravings presented to the University in 1876 by citizens of the community has, for want of a suitable gallery, been placed in different buildings on the campus. Eight large statues are in the auditorium foyer. Numerous pieces of this collection are now in the studios of the department of art and design in University Hall, and others are used to decorate the corridors and class rooms of University Hall, Natural History Hall, and the Library. A collection of eighty-one German and Japanese prints purchased by the department of art and design from the St. Louis Exposition in 1905 is displayed in the rooms of the department of art and design.

Other collections of value to art students, consisting of a number of casts of Moorish, Spanish, and German ornament and miscellaneous casts, models, prints, and drawings, are placed in the studios and corridors of the department of art and design

Classical Archeology and Art.—This museum is located in Rooms 402, 404, and 406 Lincoln Hall, and contains casts of important works of Greek and Roman sculpture; miscellaneous originals and models of Babylonian, Greek, and Roman antiquities; and many objects from the finds of the Egypt Exploration Fund, received through the generosity of Mr. W. G. Hibbard, Jr., of Chicago; about 30 Greek papyri; over 1,500 Babylonian tablets; and more than 1,700 mounted photographs of historic sites and archeological remains in Greece, Italy, and other parts of the ancient world. Over 1,600 slides belonging to the department of the classics are also available for illustrative purposes. The museum is open on Sunday, Monday, Wednesday, and Friday afternoons.

Commerce.—For its courses in industrial economics and commerce the University has a working collection of the materials of commerce; lanterns and several hundred slides; political and industrial maps; and diagrams and stereoscopic views illustrating various phases of commerce and industry. Most of the articles constituting the commercial museum are the gifts of the Philadelphia Commercial Museum and of private manufacturing and mercantile establishments.

Education.—In Room 437 Lincoln Hall is a collection of illustrative material from the manual training departments of various schools; photographs of school buildings; drawings and constructive work by pupils in the public schools; and the nucleus of a representative collection of apparatus for the school laboratory. It is planned to gather here particularly materials that are illustrative of the development of public schools in Illinois.

European Culture.—The Museum of European Culture is in the north wing of Lincoln Hall. The collection consists of casts of Romanesque, Gothic, and Renaissance sculpture, color reproductions of masterpieces of painting, original leaves and facsimiles from medieval manuscripts, early maps of the world, peasant costumes shown in full size and in small costume manikins, models of ships, a model of the Fortune Theater, replicas of seals, reproductions of prehistoric antiquities, of early ivory carving, of runic inscriptions, of early musical instruments, etc. The museum is open on Sunday, Monday, Wednesday, and Friday afternoons.

Science Group

Botany.—The herbarium contains about 65,000 sheets of mounted specimens; and several collections recently acquired but not yet incorporated will increase this number. It is already fairly representative of the higher plants and fungi of Champaign County and of the State, and forms a useful collection for the general flora of the United States. Through the recent acquisition of the herbaria of the late Dr. Frederick Brendel of Peoria and the late Dr. Jacob Schneck of Mount Carmel and the gift of the large personal herbarium of Mrs. Agnes Chase, its value for students of the Illinois flora has been largely increased. Because of the interest of Professor Burrill and his special students, Clinton, Earle, Seymour, and others, in the study of parasitic fungi, the part of the herbarium devoted to the representation of plants of this group is rich in material records of investigation, and the published "exsiccatae" in this group are well represented. The recent gift of her personal set of the Phycotheca Boreali-Americana by Mrs. Mary S. Snyder has greatly increased the reference value of the herbarium for students of algae, of which it represents over 2,000 carefully named species.

Entomology.—The entomology collections of the University include an elementary reference series of 6,400 specimens, representing 1,600 common species; and the Bolter collection, donated to the University by the executors of the estate of the late Andreas Bolter, of Chicago, which now contains about 120,000 specimens representing over 16,000 species. The department has access, also, to the insect collections of the State Laboratory of Natural History, which contain 315,000 pinned insects and 23,000 vials and bottles of specimens in alcohol, mainly from Illinois.

Geology.—The geology collections are to be found in the Natural History Building. *Lithology* is represented by type collections of rocks aggregating

9,000 specimens; 1,000 thin sections of rocks and minerals; ornamental building stones; a collection of rock samples to illustrate Illinois geology; a collection of Illinois soils (104), and one of polished marbles, granites, and other ornamental stones. The *mineralogy collection* contains over 12,000 specimens; 575 crystal models; and a collection of gems and precious stones. The *paleontology collection* (49,000 specimens) contains representative fossils from the entire geologic series, but is especially rich in paleozoic forms. It embraces the private collections of A. H. Worthen (including 742 type specimens); Tyler McWhorter; Hertzer; the greater part of the collections made by the Geological Survey of the state under Worthen; detailed stratigraphic collections from various geological formations in the Mississippi valley; 200 thin sections of corals and bryozoa; the Ward collection of casts. In September, 1913, a collection of marine and fresh water shells that had belonged to the late A. H. Worthen was presented to the Museum by Mrs. Thomas A. Worthen. This collection includes about 3,000 specimens.

The Museum of Natural History includes the zoology collections which have been specially selected and prepared to illustrate the courses of study in zoology and to present a synoptical view of the zoology of the State. Most of them are placed in the new museum room in the Natural History Building, and in adjacent corridors. The mounted mammals include a collection of the ruminants of the United States and representatives of the other orders of Mammalia except the Sirenia. The same orders are also represented by mounted skeletons.

The collection of mounted birds includes representatives of all the orders and families of North America, together with a number of characteristic tropical, Bornean, and New Zealand forms. The collection is practically complete for Illinois species. There is also a collection of the nests and eggs of Illinois birds.

The Barnum collection of birds' eggs represents about 300 species and there is a collection of nests and eggs of Illinois birds.

The cold-blooded vertebrates are represented by a series of mounted skins of larger species, both terrestrial and marine; mounted skeletons of typical representatives of the principal groups; alcoholic specimens; and casts. The alcoholics include series of the reptiles, amphibians, and fishes, the latter comprising about 300 species. The casts represent about seventy-five species, nearly all fishes.

The Mollusca are illustrated by alcoholic specimens of all classes and orders, and dissections showing the internal anatomy of typical forms. There are several thousand shells, belonging to more than 2,000 species. The collection of the Illinois aquatic species is nearly complete.

The lower invertebrates are represented by several hundred dried specimens and alcoholics, and by a series of Blaschka glass models.

The embryology of vertebrates and invertebrates is illustrated by several sets of Ziegler wax models and series of sections and other preparations.

In addition to the foregoing, the collections of the State Laboratory of Natural History are available for illustrative purposes, as well as for original investigation by advanced students.

College of Engineering

Architecture.—The collections of the department of architecture include plaster casts of architectural detail and ornament; 9,400 lantern slides of architectural subjects and 900 slides of painting and sculpture; 20,000 classified plates,

photographs, and 2,400 stereoscopic views; a working library of about 1,800 volumes on architecture and the allied arts; a collection of 300 examples of American woods, shown in three sections each; and collections of architectural drawings and of specimens of building materials, fittings, and appliances.

Civil Engineering.—The department of civil engineering has samples of iron, steel, wood, brick, and stone; materials for roads and pavements; models of arches and trusses. The department also possesses a collection of photographs and blue-print working drawings of bridges, metal skeleton buildings, masonry structures, standard railroad construction, etc.

Electrical Engineering.—This department has a collection of samples illustrating standard practise in the industrial applications of electricity. There is also a growing collection of lantern slides, photographs, blue-prints, drawings, pamphlets, and other engineering data.

Mechanical Engineering.—This department includes in its equipment part of a set of Reuleaux models; models of valve gears; sections of steam pumps; injectors; valves, skeleton steam and water gauges; standard packings; steam-pipe coverings; and drop forgings. There are also examples of castings, perforated metal, defective boiler plates, and set of drills, with samples of oil, iron, and steel. A number of working drawings from leading firms form a valuable addition to these collections.

Mining Engineering.—This department has a complete exhibit of sized coal as prepared by typical Illinois washeries, the raw materials and the finished products illustrating the briquetting of coal, models of a metalliferous mine and of timber and steel mine supports, a complete exhibit of explosive and blasting materials and appliances, breathing apparatus, and all of the appliances necessary for mine rescue and first aid demonstration, a collection of safety-lamps and other mine-lighting and signaling devices, and working drawings and photographs of mine machinery.

Municipal and Sanitary Engineering.—The collection of the department of municipal and sanitary engineering includes maps of cities and towns, working plans of waterworks, sewerage systems, water purification and sewage disposal plants, photographs of a variety of municipal engineering works, and models of filters, flushing devices, valves, pipe, tile, and well strainers.

Railway Engineering.—The department of railway engineering has an unusually complete exhibit of photographs illustrating the development in transportation; an exhibit showing the progress in the design and manufacture of rails; models of locomotive valve gears; a full-sized model of the front end of a Richmond compound locomotive; and sets of working drawings of locomotives, cars, and other railway equipment.

Theoretical and Applied Mechanics.—The department of theoretical and applied mechanics has a collection of materials of construction showing failures by tension, compression, twisting, shearing, and bending. There is a good collection of lantern slides showing the manufacture, treatment, and tests of engineering materials. There are also models showing sections of water meter, gate valve, pressure reducing valve, and turbine.

College of Agriculture

The various agricultural departments maintain collections illustrative of their work; prominent among which are those showing typical specimens of

standard varieties of corn; wax models of fruit and vegetables; a horticulture herbarium; specimens of breeds of live stock; a collection of farm machinery; and exhibits of negatives and samples showing the progress of certain investigations, especially with fruit, crops, and soils.

See further the description of the facilities for instruction and methods of work of the departments of agronomy, animal husbandry, dairy husbandry, and horticulture, under the College of Agriculture, in Part II.

Library School

The School has made a collection of books and pamphlets on library science; of library reports and catalogs; of mounted samples showing methods of administration in all departments; of labor-saving devices and fittings; and of photographs and lantern slides illustrating the history of books and libraries.

LIBRARIES

(For the Library Staff see page 30.)

The University Library includes all the books belonging to the colleges and schools of the University which are situated in Urbana and also the libraries of the College of Medicine and the School of Pharmacy in Chicago.

On October 1, 1914, the contents of the several libraries were as follows:

	Volumes	Pamphlets	Periodicals
General library, including departmental collections	282,562	30,650	3,025
State Laboratory of Natural History library	8,100	30,900	300
State Geological Survey library	1,500	4,000	.....
College of Medicine library	14,010	3,000	210
Pharmacy library	2,100	500	33

The Library is housed, for the most part, in the Library building, and is for the use of the whole University. The officers of instruction and administration of the University, the graduate students, and the members of the senior class have direct access to the shelves; other students may have this privilege upon the recommendation of their instructors. All students have the direct use of 10,700 volumes in the reading rooms, and in addition graduate students have the use of the seminar libraries.

As a part of the Library are included several special collections: *The University of Illinois collection,* including printed material illustrating the history of the University: about 300 volumes. *College Publications collection,* comprising the catalogs, announcements, reports, studies, etc., of other educational institutions: about 5,000 volumes. *Thesis collection,* a complete file of the original copies of the theses presented for graduation from the University of Illinois; they are bound and filed by years: 2,000 volumes. *The Collection of School Reports,* a carefully catalogued collection of school reports, courses of study, and other documents published by public school authorities throughout the United States. *The Dziatzko collection of Library Economy,* bought in 1905, the entire library of Karl Dziatzko, librarian of Göttingen University: 300 volumes, 250 pamphlets. *The Dittenberger Collection of the Classics,* bought in 1907, the entire library of Wilhelm Dittenberger, professor of Classical Philology in the University of Halle: 5,600 items. *The Heyne collection,* purchased

by the University in 1909, the philological library of Professor Moritz Heyne, of the University of Göttingen: about 5,000 items, principally on German philology and literature. *The Karsten collection,* principally on French and German philology and literature, the library of the late Professor Gustaf E. Karsten, presented by Mrs. Eleanor G. Karsten. The *Gröber collection,* purchased in 1912, the entire library of the late Professor Gustav Gröber, of Strasburg: 6,300 titles, principally on the Romance languages. *The Vahlen collection,* purchased in 1913, the entire classical library of the late Professor Johannes Vahlen, of Berlin: 10,000 volumes. *The Aron collection,* purchased in 1913, the pedagogical library of the late Dr. R. Aron, of Berlin: 20,000 volumes.

A number of seminar and departmental collections are maintained in various buildings on the campus, including the six seminars in Lincoln Hall; these libraries do not necessarily contain all the books in their respective subjects, but are primarily reference collections for the use of graduate students and advanced undergraduate students in the departments using the respective buildings. The principal departmental libraries and reading rooms are the following:

Name of Library	*Location*	*No. of Volumes*
Philosophy, Psychology, and Education	Lincoln Hall	10,500
Classics	Lincoln Hall	13,800
Modern languages	Lincoln Hall	19,400
English	Lincoln Hall	15,500
History and Political Science	Lincoln Hall	21,800
Economics and Sociology	Lincoln Hall	16,650
Natural History	Natural History Building	*19,000
Law	Law Building	18,500
Commerce Reading Room	Commerce Building	1,000
Architecture	Engineering Building	3,200
Agriculture Reading Room	Agricultural Building	4,600
Chemistry	Chemistry Building	5,000
Physics	Physics Building	1,000
Mathematics	Natural History Building	3,300
Railway Engineering and Mining	Transportation Building	1,000

Mason Library of Western History. The library of western history collected by Edward G. Mason, Esq., long president of the Chicago Historical Society, is in the Public Library of the city of Champaign, and is accessible to students in the University.

Library Regulations

The General Library is primarily for free reference use; any student or citizen of the State may use the books in the general reading rooms. The privilege of drawing books for use outside the building is accorded to all officers of instruction and government, to all registered students, and to other accredited persons. Books not reserved for classes may be borrowed for home use for two weeks and may be renewed for two weeks more if not specially restricted or called for. All books are subject to recall at any time when needed for university work.

General reference books, books reserved for classes, all general periodicals, and certain other groups of books are to be consulted in the reading rooms only. They may not be loaned from the Library except when the reading

*Including the State Laboratory collection.

rooms are closed. They must then be returned by the time the Library next opens.

Books from the stack which are not returned on time are subject to a fine of two cents a day. Books from the reference, reserve, and periodical shelves, as well as some special collections, are subject to a fine of twenty-five cents for the first hour and five cents for each additional hour if kept overtime. Books recalled for university work must be returned at once upon receipt of the notice. If not returned within two days after notice is mailed a fine of twenty-five cents a day is charged. All books lost or damaged must be replaced or paid for. Books not at the time needed in Urbana, or not subject to special restrictions, may be loaned for a limited period to other libraries in the State, for the use of serious students.

Hours of Opening. The General Library is open week days during the general sessions of the University, from 7:45 a. m. to 10 p. m., and on Sundays from 2 p. m. to 6 p. m. During the Summer Session, the Library is open from 7:45 a. m. to 10 p. m. on week days, but is not open on Sundays. During the summer vacation the Library is open from 9 a. m. to 12 m. Permits may be given for use at other hours. The Library is regularly closed on New Year's, Independence, Labor, Thanksgiving, and Christmas days. The hours of opening of the departmental libraries differ somewhat from those given above.

ADMINISTRATION

GOVERNMENT

The government of the University is vested by law primarily in a Board of Trustees, consisting of twelve members. The Governor of the State, the Superintendent of Public Instruction, and the President of the State Board of Agriculture are members *ex officio*. The other nine members are elected by the people of the State for terms of six years; the terms of three members expire every second year.

The administration of the University is vested by the Board of Trustees in the President of the University, the Senate, the Council of Administration, the Faculties of the several colleges, and the Deans of the colleges and Directors of the schools.

The President is the administrative head of the University.

The Senate is composed of the full professors and those other members of the faculty who are in charge of separate departments of the various colleges and schools. It is charged with the direction of the general educational policy of the University.

The Council of Administration is composed of the President, the Dean of the Graduate School, the Deans of Men and Women, and the Deans of the several colleges. It constitutes an advisory board to the President, and has exclusive jurisdiction over all matters of discipline. The Council does not determine educational policy; but when any matter arises which has not been provided for by common usage or by rule of the Senate and cannot be conveniently laid over until the next meeting of the Senate, the Council may act upon the same according to its discretion.

The Faculties of the colleges and schools of the University, composed of the members of the corps of instruction of these colleges and schools, have jurisdiction, subject to higher University authority, over all matters which pertain exclusively to these organizations.

The Dean of the Graduate School, the Deans of the several colleges, and the Directors of the schools are responsible for the carrying out of all University regulations within their respective departments.

DEPARTMENTS AND COURSES

For the purpose of administration the University is divided into several colleges and schools. These are not educationally separate, but are interdependent and form a single unit.

The colleges and schools are as follows:

I. The College of Liberal Arts and Sciences
II. The College of Engineering
III. The College of Agriculture
IV. The Graduate School
V. The Library School
VI. The School of Music

VII. The School of Education
VIII. The School of Railway Engineering and Administration
IX. The College of Law
X. The College of Medicine
XI. The College of Dentistry
XII. The School of Pharmacy

The College of Liberal Arts and Sciences offers courses in—

1. Philosophy and arts, including—
   - (a) The ancient classical languages
   - (b) The Romance languages
   - (c) The Germanic languages
   - (d) The English language and literature, including rhetoric
   - (e) Mathematics
   - (f) The political and social sciences—
     - History
     - Economics
     - Political science
     - Sociology
   - (g) Philosophical subjects—
     - Philosophy
     - Psychology
     - Education
   - (h) Art and design
2. General Science, affording opportunity to specialize in:
   - (a) Astronomy
   - (b) Geology, including mineralogy
   - (c) Physics
   - (d) Chemistry
   - (e) Ceramics*
   - (f) Botany, including bacteriology
   - (g) Zoology
   - (h) Entomology
   - (i) Physiology

By the grouping of certain subjects students in this College are also offered opportunities for specific vocational and professional training as follows:

1. Business administration—
   - (a) General business
   - (b) Secretarial service
   - (c) Banking
   - (d) Accountancy
   - (e) Railway administration—
     - Railway traffic and accountancy
     - Railway transportation
   - (f) Insurance
   - (g) Commercial teaching
2. Teaching and school administration
3. Journalism

*The courses in ceramics and ceramic engineering will be transferred to the College of Engineering on July 1, 1915.

4. Chemistry
5. Chemical engineering
6. Ceramics*
7. Ceramic engineering*
8. Household science and household administration
9. Library administration
10. Law (combined course)
11. Medicine (combined course)
12. Engineering (combined course)

The College of Engineering offers courses in—

1. Architecture
2. Architectural engineering
3. Civil engineering
4. Electrical engineering
5. Mechanical engineering
6. Mining engineering
7. Municipal and sanitary engineering
8. Railway civil engineering
9. Railway electrical engineering
10. Railway mechanical engineering

The College of Agriculture offers courses in—

1. Agronomy
2. Horticulture, floriculture, and landscape gardening
3. Animal husbandry
4. Dairy husbandry
5. Veterinary science
6. Household science
7. Agricultural extension
8. Teachers' course

Military science and *physical training* are provided in all the undergraduate colleges in Urbana.

The Graduate School offers courses in—

Philology, including the classical languages, Romance languages, Germanic languages, and English

Mathematics

Political and social sciences, including history, economics, sociology, and political science

Philosophy, including psychology and education

Physical sciences, including physics, chemistry, astronomy, and geology

Biology, including botany, zoology, entomology, and physiology

Engineering, including architecture, architectural engineering, civil engineering, electrical engineering, mechanical engineering, mechanics, mining engineering, municipal and sanitary engineering, and railway engineering

Agriculture, including agronomy, animal husbandry, dairy husbandry, floriculture, horticulture, and thremmatology

Household science

*The courses in ceramics and ceramic engineering will be transferred to the College of Engineering on July 1, 1915.

The Library School offers a professional course of two years in preparation for the librarianship, leading to the degree of Bachelor of Library Science.

The School of Music offers courses in vocal and instrumental music, leading to the degree of Bachelor of Music; and provides training in public school methods in music.

The School of Education enrolls, at the beginning of the junior year, students already registered in other colleges of the University who are preparing to teach, and directs their work for the remaining two years.

The School of Railway Engineering and Administration offers courses of study leading to the degree of Bachelor of Science in railway civil, railway electrical, and railway mechanical engineering; and also courses in railway transportation and in railway traffic and accountancy leading to the degree of Bachelor of Arts.

The Courses in Business Administration virtually constitute a school of commerce. They include courses in social and industrial economics, accountancy, banking, and railway administration, leading to the degree of Bachelor of Arts.

The College of Law offers a course of three years leading to the degree of Bachelor of Laws. One year of college work in an institution of approved standing is required for admission to the College of Law.

Students holding the bachelor's degree in arts or science may become candidates in this College for the degree of Doctor of Law (J.D.).

The College of Medicine offers a course of four years leading to the degree of Doctor of Medicine; and, in conjunction with the College of Liberal Arts and Sciences, a course of six years, leading to the two degrees of Bachelor of Arts and Doctor of Medicine.

The College of Dentistry offers a three-year course leading to the degree of Doctor of Dental Surgery.

The School of Pharmacy offers courses in the branches necessary to a scientific and practical knowledge of pharmacy, including pharmacy, chemistry, materia medica, botany, physics, and physiology. The courses lead to the degrees of Graduate in Pharmacy and Pharmaceutical Chemist.

The Summer Session, of eight weeks, offered in 1914 courses in accountancy, agricultural education, art and design, botany, chemistry, drawing (general engineering), economics, education, English, entomology, French, German, history, household science, Latin, library science, manual training, mathematics, mechanical engineering, mechanics (theoretical and applied), microscopical technics, music, physical training for men and for women, physics, political science, psychology, rhetoric, sociology, and zoology.

All the courses given in the Summer Session are of collegiate grade and may be counted toward the bachelor's degree. Certain advanced courses may be counted toward the master's degree.

ADMISSION

GENERAL STATEMENT

An applicant for admission to any of the colleges or schools of the University must be at least sixteen years of age. Candidates for admission to the College of Dentistry (Chicago) must be eighteen and candidates for admission to the School of Pharmacy (Chicago) must be seventeen years of age.

Women are admitted to all departments under the same conditions and on the same terms as men.

Students may be admitted at any time, but should enter if possible at the beginning of the fall semester (in 1915, September 20), or at the beginning of the spring semester (in 1916, February 7). Students can seldom enter the College of Engineering to advantage except at the opening of the school year in September.

The entrance requirements for the undergraduate departments, including the colleges of Liberal Arts and Sciences, Engineering, and Agriculture, and the School of Music, amounting in each case to 15 units of high-school work, are stated in detail immediately below (page 70).

The College of Law requires, in addition to 15 units of high-school credit, two years (60 semester hours) of college work in arts, letters, and science in an institution having standards equal to those of the University of Illinois. (See page 213.)

The Library School requires a bachelor's degree in arts, letters, or science from an institution having standards equal to those of the University of Illinois. (See page 195.)

The College of Medicine (Chicago) requires, in addition to 15 units of high-school credit, two years (60 semester hours) of college work in an institution having standards equal to those of the University of Illinois. (See page 220.)

The College of Dentistry (Chicago) requires an applicant for admission to present a certificate of graduation from an accredited high school or the equivalent; which equivalent is interpreted to mean 15 units of preparatory work in an accredited high school or academy or a state normal school. (See page 247.)

The School of Pharmacy (Chicago), for the year 1915-16, requires for admission to its shorter course, leading to the degree of Graduate in Pharmacy, two years of high-school work or the full educational equivalent; and for admission to its longer course, leading to the degree of Pharmaceutical Chemist, graduation from an accredited high school or the equivalent. For the year 1916-17 and thereafter, graduation from an accredited high school with 15 acceptable units will be required for admission to both courses in this school. (See page 258.)

ENTRANCE REQUIREMENTS OF THE UNDERGRADUATE COLLEGES

Under an action taken by the Board of Trustees of the University of Illinois on June 9, 1914, the following new entrance requirements for the courses leading to the degrees of Bachelor of Arts, Bachelor of Science, and

Bachelor of Music—or, in other words, for the undergraduate departments at Urbana, including the College of Liberal Arts and Sciences, the College of Engineering, the College of Agriculture, and the School of Music—go into effect September 1, 1915:

HIGH SCHOOL GRADUATION

A candidate for admission *by certificate* must be a *graduate* of an accredited high school or other accredited school.

An applicant who has not been graduated from an accredited school must pass entrance examinations in the following subjects, amounting to 7 units*:

English composition	1 unit
English literature	2 units
Algrebra (to quadratics)	1 unit
Additional subjects to be designated by the University authorities	3 units
Total	7 units

The remaining 8 units necessary to make up the 15 units required for admission may also be made in entrance examinations or may be offered by certificate from any accredited school.

NUMBER OF UNITS REQUIRED

Fifteen units of high-school or other secondary-school work, in acceptable subjects (see Lists A, B, and C below), must be offered by every candidate.

For 1915-16 students may be admitted with conditions of not more than *one unit;* that is, with a minimum of 14 units. All such conditions must be made up before the student can be permitted to register for his second year in the University.

A conditioned student is not matriculated and must pay a tuition fee of $7.50 a semester in addition to the regular incidental fee of $12.00 a semester.

No student having entrance conditions may register for a second year in the University, except on the recommendation of the faculty of the college or school in which he is enrolled, approved by the Council of Administration. Only in rare and especially meritorious cases will such permission to continue as a conditioned student be granted.

After September 1, 1916, no conditions will be permitted. In other words, every student must offer at the time of admission 15 units in acceptable subjects, including the 6 units specifically prescribed for all the undergraduate colleges (see List A below). It is provided, however, that a student who offers 15 acceptable units including the 6 units of List A, but is deficient not to exceed 2 units in subjects prescribed only for the college or curriculum which he wishes to enter, may be admitted in that college or curriculum to courses for which he is fully prepared, subject to the requirement that the deficiencies in question shall be removed before he may register for a second year's work.

PRESCRIBED SUBJECTS

Summary

The 15 units offered for admission must include:

I.	Certain subjects *prescribed alike for all courses* (see List A below)	6 units
II.	Certain subjects *prescribed in addition for the individual course* which the student wishes to enter	1 to 4 units
III.	Enough *electives in academic subjects* (see List B below) to make, with the subjects prescribed for all courses (List A) and those prescribed for the individual course of the student's choice, 12 units in academic subjects	5 to 2 units
IV.	*Three additional units,* which may be chosen either from the list of Academic Electives (List B) or from the list of Additional Electives (List C)	3 units
	Total	15 units

*A unit is the amount of work represented by the pursuit of one preparatory subject, with the equivalent of five forty-minute recitations a week, through 36 weeks; or, in other words, the work of 180 recitation periods of forty minutes each, or the equivalent in laboratory or other practise.

Detailed Statement

I. Units Prescribed for All Courses

Of the 15 units required, the following 6 units, constituting List A, are *prescribed* for admission to the freshman class in *all* the undergraduate courses of the University, and no substitutes are accepted:

LIST A

English (composition and literature)	3 units
Algebra	1 unit
Plane geometry	1 unit
Physics, or chemistry, or botany, or zoology, or physiology, with laboratory work	1 unit
Total	6 units

II. Additional Prescriptions for Individual Courses

Of the 9 units that remain, certain others are *prescribed* for admission to *individual courses,* and in each case no substitutes are accepted for the course in question. These additional prescriptions are as follows:

For the *College of Liberal Arts and Sciences,* for the courses leading to the Degree of Bachelor of Arts (including the *General Course in Literature and Arts,* the courses in *Business,** in *Journalism,* and in *Household Science,* and the *Course Preparatory to Medicine*):	
Foreign language (both units in the same language)	2 units
For the *College of Liberal Arts and Sciences* for the courses in *General Science* and in *Chemistry*—	
Science	1 unit
For *College of Liberal Arts and Sciences* for the course in *Chemical Engineering*	
Science	1 unit
German	2 units
For the *College of Engineering*	
Advanced algebra (through quadratics)	½ unit
Solid and spherical geometry	½ unit
For the *College of Agriculture*	
Science	1 unit
For the *School of Music*	
Foreign language (both units in the same language)	2 units
Music	2 units

III. Academic Electives

Enough electives must be chosen from List B below to make, with the subjects prescribed for all courses (List A) and those prescribed for the individual course of the student's choice, 12 units in academic subjects.

It will be seen that the number of such electives from List B required for the several courses is as follows:

For the *College of Liberal Arts and Sciences* for the courses leading to the degree of Bachelor of Arts (including the *General Course in Literature and Arts,* the courses in *Business,* in *Journalism,* and in *Household Science,* and the *Course Preparatory to Medicine*)	4 units
For the *College of Liberal Arts and Sciences* for the courses in *General Science* and in *Chemistry*	5 units
For the *College of Liberal Arts and Sciences* for the course in *Chemical Engineering*	8 units
For the *College of Engineering*	5 units
For the *College of Agriculture*	5 units
For the *School of Music*	2 units

LIST B

		Units
Latin	36 to 144 weeks	1-4
Greek	36 to 108 weeks	1-3
French	36 to 144 weeks	1-4
German	36 to 144 weeks	1-4
Spanish	36 to 72 weeks	1-2

*On June 9, 1914, the Board of Trustees of the University of Illinois authorized the erection of the courses in Business Administration, now given in the College of Liberal Arts and Sciences, into a separate College of Commerce. The entrance requirements for this new college will be announced at a later date.

English (4th unit)	36 weeks		1
Advanced algebra	18 weeks		½
Solid geometry	18 weeks		½
Trigonometry	18 weeks		½
History	36 to 108 weeks		1-3
Civics	18 or 36 weeks		½-1
Economics and economic history	18 or 36 weeks		½-1
Commercial geography	18 to 36 weeks		½-1
Astronomy	18 weeks		½
Geology	18 or 36 weeks		½-1
Physiography	18 or 36 weeks		½-1
Physiology	18 or 36 weeks		½-1
Zoology	18 or 36 weeks		½-1
Botany	18 or 36 weeks		½-1
Physics	36 weeks		1
Chemistry	36 to 72 weeks		1-2

IV. Additional Electives

The remaining 3 units may be chosen either from List B above or from List C:

LIST C[1]

		Units
Agriculture	36 to 72 weeks	1-2
Bookkeeping	36 weeks	1
Business law	18 weeks	½
Domestic science	36 weeks	1
Drawing	18 or 36 weeks	½-1
Manual training[2]	36 to 72 weeks	1-2
Music	36 to 72 weeks	1-2

SUMMARY BY COURSES

The requirements stated above may be summarized by colleges and courses as follows:

For the *College of Liberal Arts and Sciences* for the courses leading to the degree of Bachelor of Arts (including the *General Course in Literature and Arts,* the courses in *Business,* in *Journalism,* and in *Household Science,* and the *Course Preparatory to Medicine):*

I.	List A (prescribed for all courses)	6 units
II.	Special prescription for these courses—	
	Foreign language (both units in the same language)	2 units
III.	Electives from List B	4 units
IV.	Electives from either List B or List C	3 units
	Total	15 units

For the *College of Liberal Arts and Sciences* for the courses in *General Science* and in *Chemistry:*

I.	List A (prescribed for all courses)	6 units
II.	Special prescription for these courses—	
	Science	1 unit
III.	Electives from List B	5 units
IV.	Electives from either List B or List C	3 units
	Total	15 units

For the *College of Liberal Arts and Sciences* for the course in *Chemical Engineering:*

I.	List A (prescribed for all courses)	6 units
II.	Special prescriptions for this course—	
	Science	1 unit
	German	2 units
III.	Electives from List B	3 units
IV.	Electives from either List B or List C	3 units
	Total	15 units

[1]The subjects named in List C must be taught in accordance with specifications, which are set forth in the High School Manual. Further information may be had on application to the High-School Visitor.

[2]In giving credits for manual training the University specifies that the work is to be done by competent teachers, as determined by inspection, and that credit shall not exceed one unit for 360 forty-minute periods of work, including the necessary drawing and shop work.

For the *College of Engineering:*

I.	List A (prescribed for all courses)	6 units
II.	Special prescriptions for this College—	
	Algebra (through quadratics)	½ unit
	Solid and spherical geometry	½ unit
III.	Electives from List B	5 units
IV.	Electives from either List B or List C	3 units
	Total	15 units

For the *College of Agriculture:*

I.	List A (prescribed for all courses)	6 units
II.	Special prescription for this College—	
	Science	1 unit
III.	Electives from List B	5 units
IV.	Electives from either List B or List C	3 units
	Total	15 units

For the *School of Music:*

I.	List A (prescribed for all courses)	6 units
II.	Special prescription for this School—	
	Foreign language (both units in the same language)	2 units
	Music	2 units
III.	Electives from List B	2 units
IV.	Electives from either List B or List C	3 units
	Total	15 units

METHODS OF ADMISSION

The credits required for admission to the undergraduate departments, as detailed above, may be secured:

(a) By examination.

(b) By certificate from an accredited high school or other secondary school.

(c) By transfer from another university or college of recognized standing.

(A) ADMISSION BY EXAMINATION

I. The University Entrance Examinations

The University entrance examinations are given at the University in Urbana (in Room 228, Natural History Building) three times in each year: in September, immediately before the opening of the fall semester; in February, shortly before the opening of the spring semester; and in July, during the Summer Session.

These examinations cover all the subjects required or accepted for admission, as outlined in the "Description of Subjects Accepted for Admission" on pages 85 to 91.

For programs of these three sets of examinations for 1915-16, see pages 77 to 79.

II. The Examinations of the College Entrance Examination Board

The certificate of the College Entrance Examination Board, showing a grade of 60 per cent. or higher, will be accepted for admission in any subject in the lists on pages 71 and 72 in the amounts there specified as being acceptable. These examinations will be held during the week of June 14-19, 1915.

All applications for examination must be addressed to the Secretary of the College Entrance Examination Board, Post Office Sub-Station 84, New York, N. Y., and must be made upon a blank form to be obtained from the Secretary of the Board upon application.

Applications for examination at points in the United States east of the Mississippi River, and also at Minneapolis, St. Louis, and other points on the Mississippi River, must be received by the Secretary of the Board at least two weeks in advance of the examinations; that is, on or before Monday, May 31, 1915; applications for examination elsewhere in the United States or in Canada must be received at least three weeks in advance of the examinations; that is, on or before Monday, May 24, 1915, and applications for examination outside of the United States and Canada must be received at least five weeks in advance of the examinations; that is, on or before Monday, May 10, 1915.

Applications received later than the dates named will be accepted when it is possible to arrange for the admission of the candidate concerned, but only upon the payment of $5.00 in addition to the usual fee.

The examination fee is $5.00 for all candidates examined at points in the United States and Canada, and $15.00 for all candidates examined outside of the United States and Canada. The fee (which cannot be accepted in advance of the application) should be remitted by postal order, express order, or draft on New York to the order of the College Entrance Examination Board.

A list of the places at which examinations are to be held by the Board in June, 1915, will be published about March 1. Requests that the examinations be held at particular points, to receive proper consideration, should be transmitted to the Secretary of the Board not later than February 1.

III. The New York Regents' Examinations

Credits will be accepted, also, from the examinations conducted by the Regents of the University of the State of New York.

(B) ADMISSION BY CERTIFICATE FROM AN ACCREDITED PREPARATORY SCHOOL

Blank certificates for students wishing to enter the University *by certificate* from an accredited high school or academy may be had of the Registrar. They should be obtained early and should be filled out and sent in to the Registrar for approval as soon as possible after the close of the high-school year in June. Certificates received at the University after September 16 (in 1915) will be held until the arrival of the student unless such certificates are accompanied by an addressed envelope with a special delivery stamp.

Accredited Schools

The High-School Visitor of the University visits and inspects, on request, high schools and other preparatory schools throughout the State. On the basis of his reports, approved by the Committee on Accredited Schools and by the Council of Administration, the University accredits all work which is found to be sufficiently well done. For a list of Accredited Schools, correct to January 1, 1915, see page 79. Not all the schools named in this list, however, are accredited for the same amount of work nor all for the same subjects. A student presenting a certificate from any one of these schools will be given entrance credit for all the subjects named therein *for which the school is specifically accredited as shown in the certificate of its accredited relation issued to the school by the University.*

Entrance credits will also be accepted on certificate from the following sources:

1. From schools accredited by the North Central Association of Colleges and Secondary Schools.

2. From schools accredited to the state universities which are included in the membership of the North Central Association of Colleges and Secondary Schools.

3. From the state normal schools of Illinois and other state normal schools having equal requirements for graduation.

4. From schools approved by the New England College Entrance Certificate Board.

Foreign Students

Candidates for admission who come from foreign countries should bring complete official credentials. Certificates from oriental countries should be accompanied by certified translations. Upon arriving at the University foreign students should consult with the Adviser to Foreign Students, Room 214, Lincoln Hall.

Examination in Rhetoric I

Those students who show by examination a proficiency in composition sufficient to qualify them for the second semester's work in rhetoric (Rhetoric 2) may be excused from the first semester's work (Rhetoric 1). An examination to test such proficiency will be given at 7:00 p. m., on the first day of registration (in 1915, September 20). The results of this examination will be announced the following morning. Students who try this examination should defer their registration until they learn whether or not they have passed in the examination.

(C) ADMISSION BY TRANSFER OF ENTRANCE CREDITS FROM OTHER COLLEGES OR UNIVERSITIES

A person who has been admitted to another college or university of recognized standing will be admitted to this University upon presenting a certificate of honorable dismissal from the institution from which he comes and an official statement of the subjects upon which he was admitted to such institution, provided it appears that the subjects are those required here for admission by examination or real equivalents. No substitutes will be accepted for the subjects *prescribed* for all colleges or by individual colleges as indicated above (pages 70 to 73).

For admission to advanced standing by transfer of college credits see page 76 below.

Students intending to transfer to the University of Illinois should send an official statement of their college credits, accompanied by a summary of their preparatory work and by a letter of honorable dismissal, to the Registrar as early in the summer as possible.

ADMISSION AS SPECIAL STUDENTS

Persons over twenty-one years of age may be admitted as special students, provided they secure (1) the recommendation of the professor whose work they wish to take, and (2) the approval of the dean of the college concerned. They must give evidence that they possess the requisite information and ability to pursue profitably, as special students, their chosen subjects, and must meet the special requirements of the particular college in which they wish to enroll, as stated below.

A special student is not matriculated and must pay a tuition fee of $7.50 a semester in addition to the regular incidental fee of $12.00 a semester.

No one may enroll as a special student in any school or college of the University for more than two years, except by special permission, application for which must be made through the dean of the college.

A person registered as a special student in one college and desiring to take a course in another college of the University must obtain the approval of the dean of the latter college.

Special Requirements of the Colleges and Schools

The College of Liberal Arts and Sciences requires a written application, accompanied by official certificates, indicating the character and extent of the applicant's preparatory work, and showing honorable dismissal from the school last attended. In order that action may be taken on such applications before registration they should be presented at least one week before the beginning of the semester.

The College of Engineering requires that applicants for admission as special students shall satisfy the entrance requirements in mathematics and English (one and one-half years of algebra, one year of plane geometry, one-half year of solid geometry, one year of English composition, and two years of English literature).

The College of Agriculture will receive non-matriculants twenty-one years old or over, provided that if deficient in English as measured by the requirements for matriculation they shall arrange to carry English as one subject until that deficiency is made good; and provided further, in the case of men, that they shall have had at least two years of experience in practical agriculture.

The Library School requires a written application, accompanied by official certificates, indicating the character and extent of the applicant's preparatory and college work and showing honorable dismissal from the institution last attended. In order that action may be taken on such applications before registration day, they should be presented not later than September 1.

It is the practise of this School to admit as special students only those mature persons who, tho unable to meet the formal requirements for entrance, are substantially prepared for thoro and advanced work. Such persons must present evidence of possessing the requisite information and ability to pursue the chosen subjects profitably, and some substitute for the regular requirements for entrance, such as the completion of part of a college course, approved library or teaching experience, foreign travel, etc. Preference will be given to those already engaged in library work, especially in Illinois libraries, who may desire more adequate training in particular subjects.

ADMISSION TO ADVANCED STANDING

After matriculation, an applicant may secure advanced standing either by examination or by transfer of credits.

1. *By examination*—Advanced standing is granted only by examination unless the applicant is from an approved school.

2. *By transfer of credits*—Credits may be accepted for advanced standing from another university or college of recognized standing, from a state normal school, or from an approved high school (not more than the equivalent of one unit unless the high school course exceeded four years in length). An applicant for advanced standing by transfer must present a certified record of work done in the institution from which he comes, accompanied (except in cases of

transfer from high schools) by a letter of honorable dismissal. Students intending to transfer to the University of Illinois should send their credentials to the Registrar as early in the summer as possible.

PROGRAMS OF UNIVERSITY ENTRANCE EXAMINATIONS

The University entrance examinations are given at the University in Urbana (in Room 228, Natural History Building) three times in each year: in September, immediately before the opening of the fall semester; in February, shortly before the opening of the spring semester; and in July and August, during the Summer Session.

The scope of these examinations is indicated in the "Description of Subjects Accepted for Admission," pages 85 to 91.

Admission to the examinations is by permit. Permits may be obtained of the Registrar, 321 Natural History Building.

Entrance Examinations, July, 1915

*History, 1, 2, or 3 units	Sat., July 10,	8:00	a.m.
Civics, ½ unit or 1 unit	Sat., July 10,	10:00	a.m.
†Physiology, ½ unit or 1 unit	Sat., July 17,	8:00	a.m.
Commercial geography, ½ unit or 1 unit	Sat., July 17,	8:00	a.m.
†Physiography, ½ unit or 1 unit	Sat., July 17,	10:00	a.m.
Algebra, 1 unit or 1½ units	Sat., July 24,	8:00	a.m.
Plane geometry, 1 unit	Sat., July 24,	8:00	a.m.
Solid and spherical geometry, ½ unit	Sat., July 24,	10:00	a.m.
English literature, 2 units	Sat., July 31,	8:00	a.m.
English composition, 1 unit	Sat., July 31,	10:00	a.m.
Latin, 1, 2, 3, or 4 units	Sat., July 31,	8:00	a.m.
German, 1, 2, 3, or 4 units	Sat., July 31,	8:00	a.m.

The time for examinations in agriculture, astronomy, bookkeeping, botany‡, business law, chemistry‡, domestic science, drawing (freehand or mechanical), economics and economic history, the fourth unit in English, French, geology, Greek, music, physics*, Spanish, trigonometry, and zoology*, will be arranged with candidates.

Fall Examinations, September, 1915

‡Chemistry, 1 unit or 2 units	Mon., Sept. 13,	1:00	p.m.
Geology, ½ unit or 1 unit	Mon., Sept. 13,	1:00	p.m.
Astronomy, ½ unit	Mon., Sept. 13,	3:30	p.m.
Trigonometry, ½ unit	Mon., Sept. 13,	3:30	p.m.
*History, 1, 2, or 3 units	Tues., Sept. 14,	8:00	a.m.
English literature, 2 units	Tues., Sept. 14,	1:00	p.m.
English composition, 1 unit	Tues., Sept. 14,	3:30	p.m.
Latin, 1st unit, or 2nd unit, or both	Wed., Sept. 15,	8:00	a.m.
‡Physics, 1 unit	Wed., Sept. 15,	8:00	a.m.
†Physical Geography, ½ unit or 1 unit	Wed., Sept. 15,	10:30	a.m.
Algebra, 1 unit or 1½ units	Wed., Sept. 15,	1:00	p.m.
Civics, ½ unit or 1 unit	Wed., Sept. 15,	3:30	p.m.

*Three units may be offered in history, made up from the following: Ancient history to 800 A. D., 1 unit; medieval and modern history, 1 unit; English history, ½ unit or 1 unit; American history, ½ unit or 1 unit.

†Notebook required for 1 unit; not required for ½ unit.

‡Notebook required.

Economics and economic history, ½ unit or 1 unit	Wed.,	Sept. 15,	3:30 p.m.
Geometry, plane, 1 unit	Thurs.,	Sept. 16,	8:00 a.m.
Geometry, solid and spherical, ½ unit	Thurs.,	Sept. 16,	10:30 a.m.
*Physiology, ½ unit or 1 unit	Thurs.,	Sept. 16,	10:30 a.m.
German, 1st unit, or 2nd unit, or both	Thurs.,	Sept. 16,	1:00 p.m.
German, 3rd unit, or 4th unit, or both	Thurs.,	Sept. 16,	3:30 p.m.
French, 1st unit, or 2nd unit, or both	Thurs.,	Sept. 16,	1:00 p.m.
French, 3rd unit, or 4th unit, or both	Thurs.,	Sept. 16,	3:30 p.m.
Spanish, 1st unit, or 2nd unit, or both	Thurs.,	Sept. 16,	1:00 p.m.
Business law, ½ unit	Thurs.,	Sept. 16,	1:00 p.m.
Commercial geography, ½ unit or 1 unit	Thurs.,	Sept. 16,	3:30 p.m.
Latin, 3rd unit, or 4th unit, or both	Fri.,	Sept. 17,	8:00 a.m.
Bookkeeping, 1 unit	Fri.,	Sept. 17,	8:00 a.m.
†Botany, ½ unit or 1 unit	Fri.,	Sept. 17,	8:00 a.m.
†Zoology, ½ unit or 1 unit	Fri.,	Sept. 17,	10:30 a.m.

The time for examinations in agriculture, domestic science, manual training, freehand or mechanical drawing, music, Greek, and the fourth unit in English, will be arranged with applicants.

Mid-Year Examinations, February, 1916

†Chemistry, 1 unit or 2 units	Wed.,	Feb. 2,	8:00 a.m.
Geology, ½ unit or 1 unit	Wed.,	Feb. 2,	8:00 a.m.
Astronomy, ½ unit	Wed.,	Feb. 2,	10:30 a.m.
Trigonometry, ½ unit	Wed.,	Feb. 2,	10:30 a.m.
‡History, 1, 2, or 3 units	Wed.,	Feb. 2,	1:00 p.m.
English literature, 2 units	Thurs.,	Feb. 3,	8:00 a.m.
English composition, 1 unit	Thurs.,	Feb. 3,	10:30 a.m.
Latin, 1st unit, or 2nd unit, or both	Thurs.,	Feb. 3,	1:00 p.m.
†Physics, 1 unit	Thurs.,	Feb. 3,	1:00 p.m.
*Physical geography, ½ unit or 1 unit	Thurs.,	Feb. 3,	3:30 p.m.
Algebra, 1 unit or 1½ units	Fri.,	Feb. 4,	8:00 a.m.
Civics, ½ unit or 1 unit	Fri.,	Feb. 4,	10:30 a.m.
Economics and economic history, ½ unit or 1 unit	Fri.,	Feb. 4,	10:30 a.m.
Geometry, plane, 1 unit	Fri.,	Feb. 4,	1:00 p.m.
Geometry, solid and spherical, ½ unit	Fri.,	Feb. 4,	3:30 p.m.
*Physiology, ½ unit or 1 unit	Fri.,	Feb. 4,	3:30 p.m.
German, 1st unit, or 2nd unit, or both	Sat.,	Feb. 5,	8:00 a.m.
German, 3rd unit, or 4th unit, or both	Sat.,	Feb. 5,	10:30 a.m.
French, 1st unit, or 2nd unit, or both	Sat.,	Feb. 5,	8:00 a.m.
French, 3rd unit, or 4th unit, or both	Sat.,	Feb. 5,	10:30 a.m.
Spanish, 1st unit, or 2nd unit or both	Sat.,	Feb. 5,	8:00 a.m.
Business law, ½ unit	Sat.,	Feb. 5,	8:00 a.m.
Commercial geography, ½ unit or 1 unit	Sat.,	Feb. 5,	10:30 a.m.
Latin, 3rd unit, or 4th unit, or both	Sat.,	Feb. 5,	1:00 p.m.
Bookkeeping, 1 unit	Sat.,	Feb. 5,	1:00 p.m.

*Notebook required for 1 unit; not required for ½ unit.

†Notebook required.

‡Three units may be offered in history, made up from the following: Ancient history to 800 A. D., 1 unit; medieval and modern history, 1 unit; English history, ½ unit or 1 unit; American history, ½ unit or 1 unit.

*Botany, ½ unit or 1 unit.....Sat., Feb. 5, 1:00 p.m.
*Zoology, ½ unit or 1 unit.....Sat., Feb. 5, 3:30 p.m.

The time for examinations in agriculture, domestic science, manual training, freehand or mechanical drawing, music, Greek, and the fourth unit in English, will be arranged with applicants.

LIST OF ACCREDITED SCHOOLS

(Correct to January 1, 1915.)

The following high schools, having all the *prescribed* units, and enough others to make up the *required total* of 15 units, are in the list of fully accredited schools.

Not all of these schools, however, are accredited for the same amount of work, nor all for the same subjects. A student presenting a certificate from any one of these schools will be given entrance credit for all the subjects named therein *for which the said school is specifically accredited, as shown in the certificate of its accredited relation issued by the University.*

The High-School Visitor of the University inspects high schools not previously accredited upon request, if the request is accompanied by a report of the school which shows that it merits such inspection. The University accredits all work which is thus found to be sufficiently well done. For further particulars address THE HIGH-SCHOOL VISITOR, in care of the University of Illinois.

FULLY ACCREDITED SCHOOLS

School	Superintendent	Principal
ABINGDON	A. C. BUTLER	M. C. WILKINS
ALBION		
HIGH SCHOOL	ELBERT WALLER	CECILIA WHELPLEY
SOUTHERN COLLEGIATE INSTITUTE		ARVID P. ZETTERBERG
ALEDO		
HIGH SCHOOL	F. N. TAYLOR	A. F. CALDWELL
DRURY ACADEMY		W. L. RAY
ALTAMONT	WILLIAM HARRIS	GLADYS EADE
ALTON	R. A. HAIGHT	B. C. RICHARDSON
AMBOY	O. M. EASTMAN	JOHN E. WILFONG
ANNA		
HIGH SCHOOL	CHARLES MCGINNIS	C. A. HARPER
UNION ACADEMY		W. O. SHEWMAKER
ARCOLA	SHELDON R. ALLEN	
ARISPIE-INDIANTOWN TP. (*Tiskilwa*)		KENNETH M. SNAPP
ARLINGTON HEIGHTS	O. R. ZOLL	ADA R. KUGER
ARMINGTON (*Hittle Tp.*)		EUNICE BLACKBURN
ARTHUR	GROVER SUMMERS	BERTHA LECHNER
ASHLAND	F. K. BRANOM	EMMA ARROWSMITH
ASHTON	JOHN S. NOFFSINGER	L. D. WYATT
ASSUMPTION TP.		H. G. SPEAR
ASTORIA	J. R. ROWLAND	
ATLANTA	C. D. JACOBS	FRANCES CREWES
ATWOOD	GEORGE B. WEISIGER	ANNA STANSBURY
AUGUSTA	A. E. DECKER	MABEL GARWOOD
AUGUSTANA COLLEGE ACADEMY (*Rock Island*)		C. L. ESBJORN
AURORA		
EAST HIGH SCHOOL	C. M. BARDWELL	K. D. WALDO
WEST HIGH SCHOOL	A. S. KINGSFORD	K. C. MERRICK
JENNINGSSEMINARY		BERTHA BARBER
AUSTIN HIGH SCHOOL (*Chicago*)	ELLA FLAGG YOUNG	GEORGE H. ROCKWOOD
AVERYVILLE HIGH SCHOOL (*Peoria*)	HARRY E. ILER	HAZEL BROAD
BARRY	VAIL CORDELL	
BATAVIA	H. A. BONE	E. S. WILLIAMSON
BEARDSTOWN	H. G. RUSSELL	MRS. H. G. RUSSELL
BELLEVILLE	GEORGE H. BUSIEK	H. W. BRUA
BELLFLOWER TP.		DEAN M. INMAN
BELVIDERE	LEWIS A. REISNER	J. E. ALMON

*Notebook required.

School	Superintendent	Principal
Bement	Otto Weedman	Albert Applegate
Benton Tp.		E. S. Lake
Biggsville Tp.		J. Charles McMillan
Blandinsville	John E. Clum	John E. Clum
Bloomington		
High School	J. K. Stableton	William Wallis
St. Mary's High School		Rev. M. Weldon
Bloom Tp. (*Chicago Heights*)		E. L. Boyer
Blue Island	J. E. Lemon	Ray D. Crout
Bowen	Albert A. Holmes	Anna L. Wiggle
Bowen High School (*Chicago*)	Ella Flagg Young	Charles I. Parker
Bradford	F. W. Dunlap	Edna M. Johnson
Bradley Polytechnic Institute (*Peoria*)		T. C. Burgess
Bridgeport Tp.		A. F. Trams
Bushnell	T. W. Everitt	Mary C. Rasmussen
Cairo		
High School	T. C. Clendenen	Margaret Wilson
Sumner High School	T. C. Clendenen	John C. Lewis
Calumet High School (*Chicago*)	Ella Flagg Young	Grant Beebe
Cambridge	H. M. Hinkle	Arthur L. Lewis
Camp Point	W. H. Brewster	Pearl T. Brown
Canton	G. W. Gayler	V. G. Heller
Carlinville	Harvey T. White	Margaret Hubbard
Carl Schurz High School (*Chicago*)	Ella Flagg Young	Walter F. Slocum
Carlyle	M. N. Todd	
Carmi Tp.		Joseph Gersbacher
Carrollton	Edwin A. Doolittle	
Carterville	R. G. Crisenberry	A. D. Frederick
Carthage		
High School	D. H. Wells	A. M. Wilson
Carthage College Academy		H. D. Hoover, Pres.
Casey	W. G. Thompson	H. Trautman
Catlin	R. H. Perrott	Olive E. Coffeen
Central High School (*Peoria*)	G. T. Smith	A. W. Beasley
Centralia Tp.		Eston V. Tubbs
Champaign	W. W. Ernest	Lottie Switzer
Charleston	DeWitt Elwood	
Chatham	C. P. Chapman	
Chatsworth	L. C. Smith	Lyddia E. Klamm
Chenoa	A. B. Hiett	Maude Fairfield
Chester	S. E. Reecher	E. R. Sayre
Chicago Public High Schools	Ella Flagg Young	
Austin		George H. Rockwood
Bowen		Charles I. Parker
Calumet		Grant Beebe
Carl Schurz		Walter F. Slocum
Crane, R. T. (Tech.)		W. J. Bartholf
Curtis		Thomas G. Hill
Englewood		James E. Armstrong
Harrison Technical		Frank L. Morse
Hyde Park		Hiram B. Loomis
Lake		Edward F. Stearns
Lake View		B. Frank Brown
Lane Technical		W. J. Bogan
McKinley		George M. Clayberg
Marshall		Louis J. Block
Medill		Avon S. Hall
Morgan Park		John H. Heil
Phillips		Spencer R. Smith
Senn		Benjamin F. Buck
Tuley		Franklin P. Fisk
Waller		Oliver S. Westcott
Chicago Private Schools		
Latin School		R. P. Bates
Harvard School		J. J. Schobinger
F. W. Parker School		Flora J. Cooke
Kenwood Institute		Mrs. Stella Dyer-Loring
Loyola Academy		Simon Nicholas, S. J.
North Park College Academy		C. J. Wilson
Starrett School for Girls		Mrs. Helen E. Starrett
University High School		F. W. Johnson
Chicago Heights		
Bloom Tp. High School		E. L. Boyer
Chillicothe Tp.		Arthur M. Wells
Chrisman Tp.		P. M. Watson
Cicero		
J. Sterling Morton Tp.		H. V. Church
Clayton	T. J. Haney	
Clinton	H. H. Edmunds	
Colfax	P. M. Hoke	

School	Superintendent	Principal
Collegiate Institute (*Geneseo*)		Norbury W. Thornton
Collinsville Tp.		A. E. Arendt
Crane, R. T. (Tech.) High School (*Chicago*)	Ella Flagg Young	W. J. Bartholf
Crystal Lake	H. A. Dean	G. W. Weaver
Curtis High School (*Chicago*)	Ella Flagg Young	Thomas G. Hill
Dallas City	Elsie H. Giese	Howard Leinbaugh
Danville	G. P. Randle	A. W. Smalley
Decatur	J. O. Englemann	Jesse H. Newlon
De Kalb Tp.		F. M. Giles
Delavan	M. R. Staker	Marie F. Tate
Des Plaines, Maine Tp.		H. L. Howard
Dixon		
High School	W. R. Snyder	C. H. Anderson
North Dixon High School	H. H. Hagen	Gladys Gaylord
Downer's Grove	G. C. Butler	M. Maude Manley
Drury Academy (*Aledo*)		W. L. Ray
Drummer Tp. (*Gibson City*)		H. T. McKinnney
Dundee	J. V. Clark	
Du Quoin Tp.		C. W. Houk
Dwight	C. A. Brothers	Ella M. Brown
Earlville	Lloyd B. Mann	
East High School (*Aurora*)	C. M. Pardwell	K. D. Waldo
East Moline Tp.		D. B. Hoffman
East St. Louis	D. Walter Potts	H. J. Alvis
Edwardsville	Charles F. Ford	J. G. Stull
Effingham	O. C. Bailey	
Eldorado Tp.		Oren A. Barr
Elgin		
High School	Robert I. White	W. L. Goble
Elgin Academy		H. M. Buckley
Elizabeth	W. B. Storm	
Elmhurst		
High School	A. M. Nichelson	John C. Hoskinson
Evangelical Proseminar		Daniel Irion, Director
Elmwood	C. C. Condit	Harriet E. Erlbacher
El Paso Union	Carl Moore	Sylvia E. Smith
Englewood High School (*Chicago*)	Ella Flagg Young	James E. Armstrong
Equality Tp.		E. L. Stewart
Eureka	W. E. Craft	Mabel Dearth
Evangelical Proseminar (*Elmhurst*)		Daniel Irion, Director
Evanston		
Township High School		W. F. Beardsley
Evanston Academy		N. W. Helm
Fairbury Tp.		E. W. Powers
Fairfield		
Farmer City		
Moore Tp.		H. D. Eickelberg
Ferry Hall (*Lake Forest*)		Frances Laura Hughes
Flora		
Harter-Stanford Tp.		S. J. Curlee
Forrest	Dean Parrill	Ada L. Bush
Frances Shimer School (*Mt. Carroll*)		Wm. P. McKee, Dean
Freeport	S. E. Raines	L. A. Fulwider
Fulton	Harry B. Price	Mrs. C. R. Flatt
Galena	G. W. Menzimer	Katharine H. Obye
Galesburg	W. L. Steele	A. W. Willis
Galva	F. U. White	
Geneseo		
Township High School		F. J. Mabrey
Collegiate Institute		Norbury W. Thornton
Geneva	H. M. Coultrap	
Genoa	O. E. Taylor	Margaret Spraker
Georgetown Tp.		O. P. Rees
Gibson City		
Drummer Tp.		H. T. McKinney
Gilman	J. B. Wallace	
Godfrey		
Monticello Seminary		Martina C. Erickson
Grand Prairie Seminary (*Onarga*)		Hubert Phillips
Granite City	L. P. Frohardt	W. F. Coolidge
Greenfield	W. C. Suft	
Greenup	Clyde C. Sims	
Greenville	S. S. Simpson	
Griggsville	Theo. C. Moore	Lola A. Hawkins
Hamilton	J. A. Johnston	Philena Clarke
Harrisburg Tp.		Harry Taylor
Harrison Technical High School (*Chicago*)	Ella Flagg Young	Frank L. Morse

School	Superintendent	Principal
Harter-Stanford Tp. (*Flora*)		S. J. Curlee
Harvard	J. H. Light	Floyd Dewhirst
Harvard School (*Chicago*)		J. J. Schobinger
Harvey		
Thornton Tp.		L. W. Smith
Havana	T. S. Henry	
Hebron	M. S. Hamm	Rowena E. Wilson
Henry	W. E. King	Florence Scharfenstein
Herrin Tp.		T. H. Schutte
Hyde Park High School (*Chicago*)	Ella Flagg Young	Hiram B. Loomis
Heyworth	L. R. Blohm	Mrs. Lillian Anderson
Highland	C. L. Dietz	C. L. Dietz
Highland Park		
Township High School		R. L. Sandwick
Northwestern Military and Naval Academy		Dr. H. H. Rogers
Hillsboro	H. J. Beckemeyer	J. M. Avery
Hinckley	Omar Caswell	Agnes Meikle
Hindsboro Union	O. V. Schaeffer	Mabel K. Edmonson
Hinsdale Tp.	C. E. Douglass	O. J. Coe
Hittle Tp. (*Armington*)		Eunice Blackburn
Homer	George B. Routt	
Hoopeston	S. K. McDowell	
Hume	W. F. Wollenhaupt	Orville O. White
Hutsonville Tp.		Harry Thrasher
Illinois Woman's College Academy (*Jacksonville*)		Joseph R. Harker, Pres.
Illiopolis	W. P. Sullivan	Louise Gates
Industry Tp.		R. H. Malcomson
Jacksonville		
High School	C. E. Collins	C. A. R. Stone
Illinois Woman's College Academy		Joseph R. Harker, Pres.
Routt College Academy		Leo T. Hickson
Whipple Academy		C. H. Rammelkamp
Jennings Seminary (*Aurora*)		Bertha A. Barber
Jerseyville	J. Pike	E. B. Shafer
Johnston City	F. D. Harwood	C. J. Ramsay
John Swaney School (*McNabb*)		E. D. Lawrence
Joliet Tp.		J. Stanley Brown
J. Sterling Morton Tp. (*Cicero*)		H. V. Church
Kankakee	F. N. Tracy	W. R. Towsley
Kansas	R. B. Henley	Audrey Dykeman
Keithsburg	R. C. Hiett	H. V. Porter
Kenilworth		
New Trier Tp.		H. E. Brown
Kenwood Institute (*Chicago*)		Mrs. Stella Dyer-Loring
Kewanee	W. R. Curtis	
Kinmundy	E. V. Latham	Gus A. Spitze
Knoxville	G. G. Lafferty	C. V. Easum
Lacon Union	S. J. McComis	Nora L. Borchers
La Grange		
Lyons Tp.		G. H. Wilkinson
La Harpe	Justin A. Stewart	Jane Robertson
Lake High School (*Chicago*)	Ella Flagg Young	Edward F. Stearns
Lake Forest		
Lake Forest Academy		John W. Richards
Ferry Hall		Miriam L. Converse
Lake View High School (*Chicago*)		B. Frank Brown
Lanark	Charles S. Cobb	Fern Webber
Lane Technical High School (*Chicago*)		W. J. Bogan
La Salle-Peru Tp. (*La Salle*)		T. J. McCormack
Latin School (*Chicago*)		R. P. Bates
Lawrenceville Tp.		F. W. Cox
Lena	F. P. Donner	Elsie English
Le Roy	W. A. Goodier	Bert Reeves
Lewistown	C. B. Smith	G. E. Round
Lexington	Theo. F. Fieker	
Libertyville	William Hawkes	J. L. Bowman
Lincoln	H. Ambrose Perrin	
Litchfield		
Lockport Tp.		Alfred Livingston
Loda	George H. Wells	
Lovington Tp.		L. W. Chatham
Loyola Academy (*Chicago*)		Simon Nicholas, S. J.
Lyons Tp. (*La Grange*)		G. H. Wilkinson
McKinley High School (*Chicago*)	Ella Flagg Young	George M. Clayberg
McLean	J. H. Yoder	Belle Fairfield
McLeansboro	L. G. Hickman	Robert Wilson
McNabb		
John Swaney School		E. D. Lawrence
Macomb		
High School	T. M. Birney	B. H. Watt
Western Illinois State Normal Academy		W. P. Morgan, Pres.

School	Superintendent	Principal
Madison	Louis Baer	
Magnolia	A. F. Butters	Margaret Lockland
Maine Tp. (*Des Plaines*)		H. L. Howard
Mansfield	J. A. Alexander	Lois A. Morrow
Manteno	C. W. Eaton	Myrtle Stahl
Manual Training High School (*Peoria*)		William N. Brown
Marengo	E. A. Gardner	Charles O. Haskell
Marion Tp.		Oren Coleman
Marseilles	E. A. Collins	Elinore A. Bates
Marissa Tp.		Anna J. McNabney
Marshall High School (*Chicago*)	Ella Flagg Young	Louis J. Block
Marshall Tp.		Lewis Williams
Martinsville	E. D. Abbott	
Mason City	G. A. Buzzard	L. B. Curry
Mattoon	J. F. Wiley	H. B. Black
Maywood		
Proviso Tp.		John E. Witmer
Mazon Tp.		E. C. Shields
Medill High School (*Chicago*)	Ella Flagg Young	Avon S. Hall
Mendon	Heywood Coffield	Florence Schafer
Mendota	J. H. Browning	B. J. Dean
Metropolis	M. N. McCartney	
Milford Tp.	H. W. McCulloch	Pearl Hickman
Minonk	Guy R. French	
Moline	C. H. Maxson	E. P. Nutting
Momence		
Monmouth	C. E. Joiner	Mary Findley
Monticello	A. W. Gross	Ruby L. Allen
Monticello Seminary (*Godfrey*)		Martina C. Erickson
Moore Tp. (*Farmer City*)		H. D. Eickelberg
Morgan Park High School (*Chicago*)		John H. Heil
Morgan Park Academy		Harry D. Abells
Morris	E. D. Martin	
Morrison	W. E. Weaver	Mary L. Barnes
Morrisonville	Matilda J. Pinkerton	P. A. Tate
Morton Tp.		T. L. Cook
Mound City	C. L. McCabe	Mary Roberson
Mt. Carmel	A. S. Anderson	J. T. Dorris
Mt. Carroll		
High School	G. V. Clum	Gayle H. Au
Frances Shimer School		W. P. McKee, Dean
Mt. Morris College Academy		J. E. Miller
Mt. Pulaski Tp.		L. F. Fulwiler
Mt. Sterling	M. L. Test	Clara Louise Doocy
Mt. Vernon Tp.		James M. Dixon
Moweaqua	C. W. Yerkes	J. Earl Hiett
Murphysboro Tp.		G. J. Koons
Naperville		
High School	O. A. Waterman	V. B. Graham
Northwestern College Academy		C. J. Attig
Nashville	W. C. Fairweather	R. E. Hiller
Nzoga Tp.		W. L. Hagan
Newman Tp.		J. H. Trinkle
Newton	C. E. Girhard	
New Trier Tp. (*Kenilworth*)		H. E. Brown
Nokomis	W. P. Thacker	Lucile Heskett
Normal		
High School	C. F. Miller	E. L. King
University High School		Ralph W. Pringle
North High School (*Dixon*)	H. H. Hagan	Gladys Gaylord
North Park College Academy (*Chicago*)		C. J. Wilson
Northwestern College Academy (*Naperville*)		C. J. Attig
Northwestern Military Academy (*Highland Park*)		Dr. H. H. Rogers
Oakland	G. W. Sutton	D. O. Kime
Oak Park and River Forest Tp. (*Oak Park*)		M. R. McDaniel
Oblong	V. I. Brown	Nelle Perry
Odell	V. T. Smith	Miss H. Lyons
Olney Tp.		H. W. Hostettler
Onarga		
High School	S. E. Le Mar	
Grand Prairie Seminary		Hubert Phillips
Oregon	F. G. Taylor	Sue L. Wilson
Ottawa Tp.		Charles H. Kingman
Palatine Tp.		W. H. Hughes
Palestine Tp.		D. B. Fager
Pana Tp.		W. E. Andrews

School	Superintendent	Principal
Paris	J. G. Moore	
F. W. Parker School (*Chicago*)		Flora J. Cooke
Pawnee Tp.		W. B. Rose
Paw Paw	Henry E. Cobb	Grace M. Currier
Paxton	O. J. Bainum	
Pekin	Robert C. Smith	G. E. True
Peoria		
Academy of Our Lady		Sister Marietta
Averyville High School	Harry E. Iler	Hazel Broad
Bradley Polytechnic Institute		T. C. Burgess, Director
Central High School	G. T. Smith	A. W. Beasley
Manual Training High School		William N. Brown
Peotone	L. A. Joel	
Petersburg	H. A. Paine	
Phillips High School (*Chicago*)	Ella Flagg Young	Spencer R. Smith
Pittsfield	J. C. Reeder	
Plainfield	H. J. Bassler	Verne E. Perry
Plano	R. E. Locke	H. L. Tate
Polo	H. B. Urban	
Pontiac Tp.		Arthur Verner
Princeton Tp.		W. R. Spurrier
Princeville	W. M. Loy	Pearl B. Hood
Prophetstown	V. R. McKnight	A. H. Kazda
Proviso Tp. (*Maywood*)		John E. Witmer
Quincy		
High School	E. G. Bauman	Zens L. Smith
St. Mary's Academy		Mother Mary Petra
Rantoul	E. H. Miller	Jessie McHarry
Raymond	W. F. Grotts	F. J. Du Frain
Richmond	Oswell G. Treadway	
Ridgefarm Tp.		L. A. Tohill
Riverside	A. F. Ames	T. H. Ziegler
Robinson Tp.		J. O. Marberry
Rochelle	Lewis A. Mahoney	R. A. Scheer
Rock Falls	E. O. Phares	Bessie Price
Rockford	R. G. Jones	C. P. Briggs
Rock Island		
High School	E. C. Fisher	A. J. Burton
Augustana College Academy		C. L. Esbjorn
Villa de Chantal	Mother Borgia	Sister Mary Agnes
Rollo Consolidated		J. A. Tate
Roodhouse	J. O. Stanberry	C. A. Whiteside
Roseville Tp.		H. L. Kessler
Rossville	I. A. Smothers	
Rushville	C. E. Knapp	
Rutland	W. E. Gutteridge	Janet Arie
St. Anne	E. L. Kimball	
St. Charles	M. F. McAuley	M. J. Langwill
St. Elmo	Charles E. Kuechler	
St. Mary's Academy (*Quincy*)		Mother Mary Petra
St. Mary's High School (*Bloomington*)		Sister Marie Alphonse
Salem	H. J. Blue	H. J. Karch
Sandwich	W. W. Woodbury	Maud Webster
Savanna Tp.		C. M. Higgins
Saybrook	George White	Frances Hanson
Senn High School (*Chicago*)		Benj. F. Buck
Sheffield	J. H. Martin	J. H. Martin
Shelbyville	A. F. Lyle	I. B. Potter
Sheldon	P. F. Grove	Ina V. Meredith
Sidell Tp.		Virlon W. McIntire
Southern Collegiate Institute (*Albion*)		Arvid P. Zetterberg
Sparta	St. John W. Wilton	
Springfield		
High School	H. S. Magill, Jr.	F. D. Thomson
Ursuline Academy		Mother Paul
Stanford	W. Brooks Wiles	Mrs. Cecil R. Wiles
Staunton	William E. Eccles	
Sterling Tp.		E. T. Austin
Stockland Tp.		Ottis Hoskinson
Stockton	J. C. Myers	J. S. Clark
Stonington	G. E. Lowry	Rachel Parish
Streator Tp.		O. A. Rawlins
Stronghurst	Walter S. Pope	Lucile White
Sullivan	B. H. Gault	
Sycamore	O. E. Peterson	Edna M. Koch
Taylorville Tp.		R. G. Beals
Thornton Tp. (*Harvey*)		L. W. Smith
Tiskilwa		
Joint Tp.		Kenneth M. Snapp
Toulon Tp.		Eugene Mendenhall

School	Superintendent	Principal
Tuley High School (*Chicago*)	Ella Flagg Young	Franklin P. Fisk
Tuscola	W. D. Waldrip	J. C. Hammond
Union Academy (*Anna*)		W. O. Shewmaker
University High School (*Chicago*)		F. W. Johnson
Upper Alton		
Western Military Academy		George D. Eaton
Urbana	A. P. Johnson	M. L. Flaningam
Ursuline Academy (*Springfield*)		Mother Paul
Vandalia	Lewis Ogilvie	
Vermilion Grove		
Vermilion Academy		S. R. Lamb
Villa de Chantal (*Rock Island*)		Sister Mary Agnes
Villa Grove	H. L. Dyar	E. C. Franklin
Virden	Clyde Slone	
Virginia		
Waller High School (*Chicago*)		Oliver S. Westcott
Walnut	R. Grigsby	E. A. Lansche
Warren	R. I. Lewis	
Washburn	L. Ada Kreider	Leola Morris
Washington	P. M. Smith	
Waterloo	James E. Raibourn	
Watseka	L. W. Haviland	
Waukegan Tp.		Mary J. Laycock
Wenona	R. E. Garrett	W. C. Knoelk
West Chicago	H. H. Kirkpatrick	J. Grace Walker
West High School (*Aurora*)	A. S. Kingsford	Norma Conyne
Western Illinois State Normal Academy (*Macomb*)		K. C. Merrick
Western Military and Naval Academy (*Upper Alton*)		W. P. Morgan, Pres.
Westfield College Academy		George D. Eaton
Westville	J. E. Lung	
Wheaton		Charles O. Madson
High School	J. B. Russell	
Wheaton College Academy		Ella M. Gregg
Whipple Academy (*Jacksonville*)		W. F. Rice, Dean
White Hall	J. B. Hendricks	C. H. Rammelkamp
Wilmington		Robert G. Smith
Winchester	Charles W. Smith	
Woodstock	R. W. Bardwell	Myrtle Scott
Wyoming	C. W. Pratt	A. M. Holtzmann
Yorkville	F. W. Ackerman	R. F. Graner
		Elizabeth M. Hatch

PARTIALLY ACCREDITED SCHOOLS

Byron	H. V. Lynn	Angeline Willoughby
East St. Louis		
Lincoln High School		
Farmington	E. A. Huff	
Knoxville		
St. Alban's School		L. B. Hastings, Rector

DESCRIPTION OF SUBJECTS ACCEPTED FOR ADMISSION

The amount of work in each of the foregoing subjects which corresponds to the minimum number of credits assigned is shown by the description of subjects below.

1. Agriculture.—Courses in agriculture should be arranged for periods of not less than 36 weeks. Such a course may be accepted for one unit of entrance credit, and two such courses may be accepted for two units, provided the work covered by each course is so closely related in its parts as to constitute one of the generally accepted divisions now recognized in agricultural work. At least one-half the time should be devoted to laboratory work, and note-books should be presented.

2. Algebra.—Fundamental operations, factoring, fractions, simple equations, involution, evolution, radicals, quadratic equations and equations reducible to the quadratic form, surds, theory of exponents, and the analysis and solution of problems involving these.

3. Astronomy.—In addition to a knowledge of the descriptive matter in a good text-book, there must be some practical familiarity with the geography of

the heavens, with the various celestial motions, and with the positions of the conspicuous naked-eye heavenly bodies.

4. Bookkeeping.—The unit of work in bookkeeping for college entrance should consist of a working knowledge of both single and double entry bookkeeping for the usual lines of business. The student should be able to change his books from single to double entry and from individual to proprietorship. At least one set of transactions should be kept by single entry and at least two sets by double entry in which the uses of the ordinary bookkeeping books and commercial papers should be involved. The student should be drilled in the making of profit and loss statements and of balance sheets and should be able to explain the meanings of the items involved in both kinds of instruments. The work should be done under the immediate supervision of a teacher and the student should devote at least ten periods of not less than forty minutes full time in class each week for one academic year.

5. Botany.—A familiar acquaintance with the general structure of plants and of the principal organs and their functions, derived to a considerable extent from a study of the objects, is required; also a general knowledge of the main groups of plants; and the ability to classify and name the more common species. Laboratory note-books and herbarium collections should be presented.

6. Business Law.—The amount of business law which is accepted is indicated by the ground covered in any of the ordinary text-books on the subject, such as Spencer's Elements of Commercial Law, Burdick's Business Law, and White's Elements of Commercial Law.

7. Chemistry.—The instruction must include both text-book and laboratory work. The work should be so arranged that at least one-half of the time shall be given to the laboratory. The course as it is given in the best high schools in one year will satisfy the requirements of the University for the one unit for admission. The laboratory notes, bearing the teacher's indorsement, must be presented as evidence of the actual laboratory work accomplished. Candidates for admission may be required to demonstrate their ability by laboratory tests.

8. Civics.—Such an amount of study of the American Government, its history and interpretation, as is indicated by any of the usual high-school text-books on civil government, is regarded as sufficient for one term. The work may advantageously be combined with the elements of political economy.

9. Commercial Geography.—The amount and character of the work accepted in this subject is indicated by the scope of such books as Redway's Commercial Geography, Adam's smaller book on the same subject, the text-books of Brigham, or Robinson, or Trotter's work.

10. Domestic Science.—(a) An equivalent of 180 hours of prepared work with at least two recitation periods a week in foods. (b) An equivalent of 180 hours of prepared work with at least one recitation period a week in clothing. (c) An equivalent of 180 hours of prepared work with at least two recitation periods a week on the home. (Two periods of laboratory work are considered equivalent to one period of prepared work.) Of the foregoing, (a) will be accepted as a unit's work; or two half units taken from (a) and (b), or (a) and (c), or (b) and (c) will be accepted as a unit's work. The work is to be done by trained teachers with individual equipment, as determined by inspection.

11. Drawing.—Free-hand or mechanical drawing, or both. Drawing-books or plates must be submitted. The number of credits allowed depends on the quantity and quality of the work submitted.

12. Economics.—The principles of economics, with economic history, as given in any good elementary text-book.

13. English Composition and Rhetoric.—Correct spelling, capitalization, punctuation, paragraphing, idiom, and definition; the elements of rhetoric. The candidate will be required to write two paragraphs of about one hundred fifty words each to test his ability to use the English language. This work counts for one unit.

14. English Literature.—(a) Each candidate is expected to have read certain assigned literary masterpieces, and will be subjected to such an examination as will determine whether or not he has done so. With a view to a large freedom of choice, the books provided for reading are arranged in the following groups, from which at least ten units are to be selected, two from each group. Each unit is here set off by semicolons.

I. The Old Testament, comprising at least the chief narrative episodes in Genesis, Exodus, Joshua, Judges, Samuel, Kings, and Daniel, together with the books of Ruth and Esther; the Iliad, with the omission, if desired, of Books XI, XIII, XIV, XV, XVII, XXI; the Odyssey, with the omission, if desired, of Books I, II, III, IV, V, XV, XVI, XVII; Virgil's Aeneid. The Iliad, the Odyssey, and the Aeneid should be read in English translations of recognized literary excellence.

For any unit of this group a unit from any other group may be substituted.

II. Shakespeare's Merchant of Venice; Midsummer Night's Dream; As You Like It; Twelfth Night; Henry the Fifth; Julius Caesar.

III. Defoe's Robinson Crusoe, Part I; Goldsmith's Vicar of Wakefield; Scott's Ivanhoe or Quentin Durward; Hawthorne's House of Seven Gables; Dickens' David Copperfield or Tale of Two Cities; Thackeray's Henry Esmond; Mrs. Gaskell's Cranford; George Eliot's Silas Marner; Stevenson's Treasure Island.

IV. Bunyan's Pilgrim's Progress, Part I; The Sir Roger de Coverley Papers in the Spectator; Franklin's Autobiography (condensed); Irving's Sketch Book; Macaulay's Essays on Lord Clive and Warren Hastings; Thackeray's English Humorists; selections from Lincoln, including the two Inaugurals, the Speeches in Independence Hall and at Gettysburg, the Last Public Address, and the Letter to Horace Greeley, with a brief memoir or estimate; Parkman's Oregon Trail; either Thoreau's Walden or selection from Huxley's Lay Sermons; Stevenson's Inland Voyage and Travels with a Donkey.

V. Palgrave's Golden Treasury (First Series), Books II and III, with especial attention to Dryden, Collins, Gray, Cowper, Burns; Gray's Elegy in a Country Churchyard and Goldsmith's Deserted Village; Coleridge's Ancient Mariner and Lowell's Vision of Sir Launfal; Scott's Lady of the Lake; Byron's Childe Harold, Canto IV, and Prisoner of Chillon; Palgrave's Golden Treasury (First Series), Book IV, with especial attention to Wordsworth, Keats, and Shelley; Poe's Raven, Longfellow's Courtship of Miles Standish, Whittier's Snow Bound; Macaulay's Lays of Ancient Rome and Arnold's Sohrab and Rustum; Tennyson's Gareth and Lynette, Lancelot and Elaine, The Passing of Arthur; Browning's Cavalier Tunes, The Lost Leader, How They Brought the Good News from Ghent to Aix, Home Thoughts from Abroad, Home Thoughts from the Sea, Incident of the French Camp, Hervé Riel, Pheidippides, My Last Duchess, Up at a Villa—Down in the City.

(b) In addition to the foregoing the candidate will be required to present a careful, systematic study, with supplementary reading, of the history of either English or American literature.

(c) The candidate will be examined on the form and substance of certain books in addition to those named under (a). For 1915 the books will be selected from the list below. The examination will be of such a character as to require a minute study of each of the works named in order to pass it successfully. The list is:

Shakespeare's Macbeth; Milton's Comus, L'Allegro, and Il Penseroso; Burke's Speech on Conciliation with America, or Washington's Farewell Address and Webster's First Bunker Hill Oration; Macaulay's Life of Johnson, or Carlyle's Essay on Burns.

The work outlined in (a), (b), and (c) counts for two units.

(d) The three units in English composition, rhetoric, and literature, as described above, are required for all students. A fourth unit may be obtained for one full year's additional work in the study of English and American authors.

15. FRENCH.—*First year's work.*—Elementary grammar, with the more common irregular verbs. Careful training in pronunciation. About 100 pages of easy prose should be read.

Second year's work.—Advanced grammar, with all the irregular verbs. Elementary composition, and conversation. About 300 pages of modern French should be read.

Third year's work.—Intermediate composition, and conversation. About 500 pages of standard authors should be read, including a few classics.

Fourth year's work.—Advanced composition, and conversation. Standard modern and classical authors should be read and studied to the extent of 700 pages.

16. GEOLOGY.—The student must show familiarity with the principles of dynamic and structural geology, and some acquaintance with the facts of historical geology as presented in Scott's Introduction to Geology, Brigham's Text-book of Geology, or an equivalent, together with at least an equal amount of time spent in laboratory and field work. The laboratory work should follow one or more of the lines indicated below, and note-books should be presented showing the character and amount of work done. (a) Studies of natural phenomena occurring in the neighborhood which illustrate the principles of dynamic geology. Each study should include a careful drawing of the object and a written description of the way in which it was produced. (b) Studies of well-marked types of crystalline, metamorphic, and sedimentary rocks which will enable the student to recognize each type and state clearly the conditions under which it was formed. (c) Studies of minerals of economic value, including the characteristics of each, its origin, and the uses to which it is put. (d) Studies of the types of soil occurring in the neighborhood, including the origin of each and the cause of differences in appearance and fertility.

17. GEOMETRY.—(a) Plane *Geometry.* Special emphasis is placed on the ability to use propositions in the solution of original numerical exercises and of supplementary theorems.

(b) *Solid and Spherical Geometry.* Applications to the solution of original exercises are emphasized.

18. GERMAN.—It is recommended that pupils be trained to understand spoken German and to reproduce freely in writing and orally what has been

read. Whatever method of teaching is used, however, a thorough knowledge of grammar is expected. No attempt is made in what follows to give more than a general outline for the work of successive years, but the German department welcomes inquiries from teachers who wish further suggestions in the planning of courses.

First Year's Work.—At the end of the year pupils should be able to read intelligently and with accurate pronunciation simple German prose, to translate it into idiomatic English, and to answer in German easy questions on the passage read. A few short poems may well be memorized. Elementary grammar should be mastered up to the subjunctive as arranged in most books for beginners. Easy prose composition rather than the writing of forms will be the test of this grammatical work in entrance examinations given by the University.

Second Year's Work.—Only modern writers should be read, preference being given to material which has a distinctly German atmosphere and which lends itself readily to conversational treatment in the class room. The regular recitations should afford constant oral and written drill on the elementary grammar of the previous year. In addition, the beginner's book should be completed, but more importance is attached to accuracy and facility in simple modes of expression than to a theoretical knowledge of advanced syntax.

Third Year's Work.—Most of the time should still be devoted to good modern prose. There should be some work in advanced prose composition—based on German models—and the daily recitations should continue to afford abundant oral practise. Pupils ought by this time to understand spoken German fairly well.

Fourth Year's Work.—At the end of this year a pupil should be able to read at sight any prose or verse of moderate difficulty. He should also be able to express himself orally or in writing with considerable readiness and a high degree of accuracy. It is recommended that work in composition take the form of free reproduction of portions of the texts studied rather than translation of English selections. The reading should be divided about equally between modern and classical authors.

19. Greek.—*First Year's Work.*—The exercises in any of the beginning books, and one book of the Anabasis or its equivalent.

Second Year's Work.—Two additional books of the Anabasis and three of Homer, or their equivalents, together with an amount of Greek prose composition equal to one exercise a week for one year.

Third Year's Work.—Three additional books of the Iliad, three of the Odyssey, and Books VI, VII, VIII of Herodotus, or an equivalent from other authors.

20. History.—One, two, or three units may be presented, to be chosen from the following list:

Ancient history to 800 A. D., one unit.
Medieval and modern history, one unit.
English history, one-half or one unit.
American history, one-half or one unit.

Examinations for entrance will be given in all these subjects. The examination for each unit is intended to cover one full year of high-school work.

21. Latin.—*First Year's Work.*—Such knowledge of inflections and syntax as is given in any good preparatory Latin book, together with the ability to read simple fables and stories.

Second Year's Work.—Four books of Caesar's Gallic War, or its equivalent in Latin of equal difficulty; the ability to write simple Latin based on the text.

Third Year's Work.—Six orations of Cicero; the ability to write simple Latin based on the text; the simpler historical references and the fundamental facts of Latin syntax.

Fourth Year's Work.—Six books of Virgil's Aeneid, with history and mythology; the scansion of hexameter verse.

22. Manual Training.—The requirement for one unit is the equivalent of 360 forty-minute periods in manual training following the syllabus prepared by the manual-training section of the High School Conference.

23. Music.—At the present time, no high schools are accredited in music, and credit is therefore given only by examination at the University. As fast as possible, schools offering acceptable work in music will be accredited therefor. In the examination for two units in *piano,* students are required to play the following or the equivalent: Simple scales and arpeggios at fairly rapid tempo; scales in double octaves at a moderate speed; Bach, two-part invention; Czerny, Op. 229; an easy sonata of Haydn, Mozart, or Beethoven. In the examination for two units in *voice,* students are required to sing the following or the equivalent: Simple scales and arpeggios; studies selected from Concone, Sieber, Panofka, and Panseron; songs selected from Schubert, Schumann, and Mendelssohn. In the examination for two units in *violin,* students are required to play the following or the equivalent: Gordon's Fountain Studies; Hermann's Scale Studies; Wohlfahrt's Etudes, Book I; Kayser's Etudes; Pleyel, Duet; selections from Weiss and Blumenstengel; miscellaneous pieces by Daucla, Papini, Weidig, Sitt, etc.

24. Physics.—One year's high-school work covering the elements of physical science as presented in the best of the current high-school text-books of physics. Laboratory practise in elementary quantitative experiments should accompany the text-book work. The candidate's laboratory note-book will be considered as part of the examination.

25. Physical Geography.—The amount and character of the work required may be seen by referring to the texts of Gilbert and Brigham, or Davis; the recitations must be supplemented by at least an equal amount of time devoted to laboratory work. The laboratory exercises should follow one or more lines such as are indicated below. Each student should present a note-book showing what he has done.

(a) Studies in mathematical geography in which map and scale only are used. These should embrace such topics as length of a degree in longitude in various latitudes; length and breadth of continents, etc., in degrees and miles; relative latitudes of places; distances between cities, etc., in degrees and miles; difference in length of parallels and meridians; problems in time; location of time belts, etc.

(b) Studies of local topographic features which illustrate the various phases of stream work. Each study should include a drawing or topographic map of the object, and a full, clear description of the way in which it was formed.

(c) Studies of glacial deposits as shown in terminal and ground moraines, kames, eskers, etc.; distribution of dark and light colored soils; occurrences of lakes, ponds, gravel beds, clay banks, and waterbearing strips of sand and gravel.

(d) Studies of stream work as shown in the topographical sheets which may be obtained from the United States Geological Survey at a nominal cost.

(e) Studies of the form, size, direction and rate of movement of high and low barometer areas, and the relation of these to direction of wind, character of cloud, distribution of heat, and amount of moisture in the air, as shown in the daily weather maps. Later these studies should lead to the making of weather maps from the data furnished by the daily papers, and to local prediction of weather changes based on the student's own observation.

(f) Studies of the climate of various countries compared with our own, the necessary data being derived from such topographic, rainfall, wind, current, and temperature maps as are found in Sydow-Wagner's or Longman's atlases.

26. PHYSIOLOGY.—For one-half unit: The anatomy, histology, and physiology of the human body and the essentials of hygiene, taught with the aid of charts and models to the extent shown in Martin's Human Body (Briefer Course). For more than one-half unit, the course must include practical laboratory work.

27. SPANISH.—*First Year's Work.*—Elementary grammar, including thorough drill in the irregular verbs; careful training in pronunciation, and translation of simple Spanish when spoken; reading of about 100 pages of easy prose; simple composition and dictation.

Second Year's Work.—In addition to the foregoing, about 300 pages of modern prose; elementary syntax; dictation, composition, and translation of spoken Spanish continued.

28. TRIGONOMETRY.—The work should cover the field of plane trigonometry, as given in standard text-books, including the solution of right and oblique triangles. Special emphasis is placed upon the solution of practical problems, trigonometric identities, and trigonometric equations.

29. ZOOLOGY.—The instruction must include laboratory work equivalent to four periods a week for a half-year, besides the time required for text-book and recitation work. Note-books and drawings must be presented to show the character of work done and the types of animals studied. The drawings are to be made from the objects themselves, not copied from illustrations, and the notes are to be a record of the student's own observations of the animals examined. The amount of equipment and the character of the surroundings must, of course, determine the nature of the work done and the kind of animals studied; but in any case the student should have at least a fairly accurate knowledge of the external anatomy of each of eight or ten animals distributed among several larger divisions of the animal kingdom, and should know something of their life histories and of their more obvious adaptations to environment. It is recommended that special attention be given to such facts as can be gained from a careful study of the living animal. The names of the largest divisions of the animal kingdom, with their most important distinguishing characters, and with illustrative examples selected, when practicable, from familiar forms, ought also to be known.

GRADUATION---FIRST DEGREES

THE BACHELOR'S DEGREE

A bachelor's degree is conferred upon any student who satisfactorily completes the course of study described under one of the various colleges and schools, doing either the first three years, or the last year, of his work in residence at the University.

Residence Requirement

If the student is in residence at the University for one year only, that year's work must be taken in the college from which the degree is expected. No person will be recommended for a degree by the faculty of any college in the University unless he has been a regularly registered student in that college for at least one year.

Requirements for Graduation

A candidate for a bachelor's degree must pass in the subjects marked *prescribed* in his chosen course, and must conform to the directions given in connection with that course in regard to electives. In the College of Liberal Arts and Sciences and the College of Agriculture, credit for 130 hours is required for graduation. In the College of Engineering, in the College of Law, in the Library School, and in the School of Music, the candidate must complete the course of study as laid down.

Military Science and Physical Training

The number of hours required includes, for men, five in military drill and tactics and two in physical training; and for women, three in physical training. Men excused from the military requirements, and women who do not take the course in physical training, must elect instead an equivalent number of hours in other subjects.

Thesis

In all cases in which a thesis is required*, the subject must be announced not later than the first Monday in November, and the completed thesis must be submitted to the dean of the proper college by June 1. The work must be done under the direction of the professor in whose department the subject belongs, and must be in the line of the course of study for which a degree is expected. The thesis must be presented upon regulation paper; it is deposited in the library of the University.

Second Bachelor's Degree

A student who has already received one bachelor's degree may receive a second bachelor's degree, provided that all specified requirements for both

*See requirements for graduation in the various colleges.

degrees be fully met, and provided also that the course offered for the second degree include at least 30 semester hours not counted for the first degree.

LIST OF FIRST DEGREES

1. The degree of BACHELOR OF ARTS is conferred on those who complete a course in literature and arts, or certain courses in science, in the College of Liberal Arts and Sciences.

2. The degree of BACHELOR OF SCIENCE is conferred on those who complete a course in the College of Engineering or in the College of Agriculture. This degree is conferred on a graduate of the College of Liberal Arts and Sciences who completes a course in ceramics or in chemistry and may be conferred on graduates from other courses in this College on recommendation of the faculty.

3. The degree of BACHELOR OF LAWS is conferred on those who complete the course in the College of Law.

4. The degree of DOCTOR OF LAW is conferred on those who complete the course in the College of Law, satisfying certain special requirements additional to those for the degree of Bachelor of Laws.

5. The degree of BACHELOR OF LIBRARY SCIENCE is conferred on those who complete the course in the Library School.

6. The degree of BACHELOR OF MUSIC is conferred on those who complete one of the courses in the School of Music.

7. The degree of DOCTOR OF MEDICINE is conferred on those who complete the course in the College of Medicine.

8. The degree of DOCTOR OF DENTAL SURGERY is conferred on those who complete the course in the College of Dentistry.

9, 10. The degree of GRADUATE IN PHARMACY, or of PHARMACEUTICAL CHEMIST, is conferred on those who complete the shorter and the longer courses, respectively, in the School of Pharmacy.

HONORS AND COMPETITIONS

UNIVERSITY HONORS

The University gives public official recognition to such students as attain a high grade of scholarship by the following system of honors:

Preliminary Honors are assigned at the completion of the sophomore year on the basis of the average of the grades received during the freshman and sophomore years in all studies except military and physical training. The number of persons to whom honors are awarded may not exceed one-tenth of the membership of the sophomore class. A failure in any subject disqualifies a student from receiving these honors. Preliminary Honors afford an opportunity for sophomores to secure recognition for high scholarship without waiting for graduation.

Final Honors are assigned on graduation on the basis of the average grades received during the junior and senior years, in all the undergraduate colleges and schools of the University with the exception of those students in the College of Liberal Arts and Sciences, who are completing their courses according to the requirements of the former College of Literature and Arts, who may receive *Honors on Graduation.* The rules for conferring *honors on graduation* are stated on pages 149 and 150. The number of persons to whom final honors are awarded may not exceed one-tenth of the membership of the senior class. A failure in any subject during the junior and senior years disqualifies a student from receiving these honors. Final honors are designed especially to favor students whose preparatory education has been so imperfect as to prevent them from receiving preliminary honors.

Special Honors are awarded at the close of the senior year. No student may receive such honors who has not completed, before the beginning of his senior year, at least twenty hours' work in the subject, or group of allied subjects, in which the honors are proposed; he must complete thirty hours' work in the same subject, or group of allied subjects, by the end of his senior year, must do such other work as the professor in charge may assign, and must prepare an acceptable thesis. No student is eligible for special honors who, during the senior year, has received a grade of less than eighty per cent. in any subject. Special honors are planned for especially brilliant students who prefer to concentrate their efforts upon a special course. A student may be a recipient of both final and special honors.

The names of students receiving honors are published in the Annual Register of the University. (See Part VI.)

DEBATING AND ORATORY

The University engages yearly in four intercollegiate debates, the teams for which are chosen in a series of competitive preliminaries to which all students are eligible. Through the generosity of Hon. William B. McKinley a gold

watch-fob is presented to every speaker who represents the University, either in debate or in oratory.

The Central Debating Circuit of America is an association formed by the universities of Illinois, Iowa, Minnesota, Nebraska, and Wisconsin. It holds a debate at each university on the Friday evening following the Thanksgiving recess.

The State University Debating League consists of the state universities of Illinois, Indiana, and Ohio. Under its auspices three debates are held upon the second Friday in March, each university sending out an affirmative and a negative team.

The Northern Oratorical League, consisting of Northwestern University, Oberlin College, and the state universities of Illinois, Iowa, Michigan, Minnesota, and Wisconsin, holds an annual contest on the first Friday evening in May. The contest for 1915 will be held on May 7, at the State University of Iowa, at Iowa City. The winner receives the Lowden testimonial of one hundred dollars, and the speaker awarded second place, fifty dollars. The Illinois representative is selected in competitive contests open to all undergraduates.

The Intercollegiate Peace Association holds annual state and inter-state oratorical contests to which representatives of this University are eligible. Orations must be upon some phase of the peace question. Cash prizes are offered in both contests.

A Freshman-Sophomore Debate and an Inter-Society Declamation Contest are held yearly.

The names of students who represented the University in debate and oratory in 1913-14 are given in the list of honors at the end of this volume.

The Interscholastic Oratorical Prize

A medal of the value of twenty dollars, and two medals of the value of ten dollars each, are offered annually by the University to the high schools of the State for the best orations delivered in a competitive contest between their representatives. This contest takes place in the spring at the time of the interscholastic athletic meet—in 1915, on May 14.

THE BRYAN PRIZE

In 1898 Mr. William Jennings Bryan gave to the University the sum of two hundred fifty dollars, from the interest on which a prize of twenty-five dollars is offered biennially for the best essay on the science of government. The contest is open to all matriculated undergraduate students. The essays may not be less than three thousand, nor more than six thousand words in length, and must be left at the President's office not later than the second Wednesday in May. The prize was offered for the first time in 1901. It will be offered next in 1915.

B'NAI B'RITH PRIZES

The Champaign and Urbana lodge of the Independent Order of B'nai B'rith has donated to the University the sum of fifty dollars, to be awarded in prizes to students of the University for essays on Jewish subjects. The sum named is the second of five annual contributions to be given for this purpose. For information in regard to the conditions governing the award of the prizes, address the Registrar, University of Illinois, Urbana, Illinois.

ARCHITECTURE

The Francis J. Plym Fellowship in Architecture

By the generosity of Mr. Francis J. Plym, of Niles, Michigan, a graduate of the University of Illinois of the class of 1897, the Trustees have been enabled to establish a fellowship for the advanced study of architecture. The stipend attached to this fellowship is $1,000, awarded annually by competition in Architectural Design. The holder of the fellowship is required to spend a year in study and travel abroad. For further information address the Department of Architecture.

The Joseph C. Llewellyn Prize in Architectural Engineering

In June, 1913, Mr. Joseph C. Llewellyn, of Chicago, a graduate of the University of the class of 1877, established, for a period of four years, a prize of fifty dollars per annum for a problem in design, the competition being limited to students in architectural engineering.

The Prize in Architecture of the American Academy in Rome is open for competition among qualified undergraduates and graduates of certain American architectural schools, including that of the University of Illinois. This prize grants three years of residence and travel abroad for the study of classic and renaissance architecture.

MILITARY CONTESTS AND PRIZES

The University Bronze Medals

Bronze medals typical of the University and its Military Department are awarded by the University to the members of the infantry companies and artillery and signal detachments which shall score the greatest number of points at the annual competitive drill, held at some time between May 15 and May 31. The members of the company rifle team making the highest score at gallery target practise are also awarded medals. The medals so awarded become the permanent property of the recipients. A complete roster of the winning organizations is published in the Annual Register of the University for the following year. (See Part VI.)

The University Gold Medal

The Board of Trustees provides annually a gold medal which is to be awarded, at the annual competitive drill held near the close of the year, to the best drilled student, whose property the medal becomes. Each student must have matriculated in the University and must have completed one semester's work in Military 1 with a grade of not less than 90, and three semesters' work in Military 2 with a grade of not less than 95; and he must have an average standing of not less than 85 per cent in all of his other studies for the preceding semester, which standing shall be determined by the Registrar. The name of the winner is published in the Annual Register of the University for the following year. The reward is made for excellence in the same details as in the Hazelton contest.

The Hazelton Prize Medal

Captain W. C. Hazelton provided in 1890 a medal, which is awarded, at a competitive drill held at some time between May 15 and May 31, to the

best drilled student. Each competitor must have been in attendance at the University at least sixteen weeks of the current college year; must have had less than five unexcused absences from drill; and must present himself for competition in full uniform.

The award is made for excellence in:

1. Erectness of carriage, military appearance, and neatness
2. Execution of the school of the soldier, without arms
3. Manual of arms, with and without numbers

The name of the successful competitor is published in the Annual Register of the University for the following year. He is given a certificate setting forth the fact, and may wear the medal until the fifteenth day of the May following, when he must return it for the next competition.

LECTURES AND OTHER GENERAL EXERCISES

A part of the instruction afforded by the University to its students is given through the medium of lectures by distinguished men and women from outside the University faculty and by means of exhibitions, recitals, and other exercises distinct from the regular courses of instruction. A partial list of these exercises for the calendar year 1914 follows. Lectures by members of the University faculty are excluded from this list.

GENERAL UNIVERSITY EXERCISES

Convocations

Feb. 22. UNIVERSITY CONVOCATION: Address by Dean DAVID KINLEY.

April 30. UNIVERSITY CONVOCATION: Address by Dr. CHARLES R. BROWN, Dean of Yale Divinity School.

June 16. GREGORY MEMORIAL EXERCISES: Addresses by Dr. EDMUND J. JAMES, President of the University; Mr. WILLIAM E. PRAEGER, Professor of Biology, Kalamazoo College; Dr. MARTIN L. D'OOGE, Professor *Emeritus* of Greek, University of Michigan; Hon. HENRY M. BEARDSLEY, Attorney, former mayor of Kansas City, Missouri.

Sept. 23. ANNUAL CONVOCATION FOR FRESHMEN.

Oct. 20. UNIVERSITY CONVOCATION: Addresses by members of the faculty.

Dec. 3. UNIVERSITY CONVOCATION: Illinois Day address by Dr. EDMUND J. JAMES, President of the University.

University Exchange Lectures

April 14, 17, 21, 22, 24. Dr. SHOSUKE SATO, President, College of Agriculture, North Eastern Imperial University of Japan, and Japanese Exchange Lecturer for 1914: "Social Reforms and Changes Since the Restoration" (Illustrated), "The Old Feudalism and the New Imperialism", "Local Autonomy and Constitutional Government", "The Educational System and Religious Movements", "Agricultural Credit and Rural Sociology".

General University Lectures

April 23. Dr. GEORGINA SWEET, Lecturer on Biology, University of Melbourne: "Australia and Its Universities" (under the auspices of the department of zoology).

April 27-May 1. Mr. I. B. STOUGHTON HOLBORN, Merton College, Oxford, England: "The Philosophy of the Beautiful", "Gothic Architecture".

May 2. Dr. DAVID PHILIPSON, Rabbi, Cincinnati, Ohio: "Fundamental Jewish Social Concepts" (under the auspices of the Menorah Society).

May 3. Mr. I. B. STOUGHTON HOLBORN, Merton College, Oxford, England: "The Open Space Movement".

June 14. Rev. CHARLES M. STUART, President, Garrett Biblical Institute, Northwestern University: Baccalaureate Address.

June 15. Hon. EDWARD MCDERMOTT, Lt.-Governor of Kentucky: "Eternal Public Problems" (under the auspices of Phi Beta Kappa and Sigma Xi).

June 17. His Excellency, Count JOHANN VON BERNSTORFF, Imperial German Ambassador to the United States: Address at the Forty-third Annual Commencement Exercises.

Nov. 15. Mr. ISAIAH L. SHARFMAN, Junior Professor of Political Economy, University of Michigan: "Jewish Ideals" (under the auspices of Menorah Society).

Dec. 7. Dr. A. A. NEWMAN, Dropsie College, Philadelphia: "Jewish Social Life in Medieval Spain" (under the auspices of the Menorah Society).

Lectures Under the Auspices of the University Christian Associations

Jan. 18. Mr. DAVID C. CALDWELL, Principal, Louisville Manual Training High School: "Winston Churchill's 'The Inside of the Cup'".

Jan. 25. Mr. J. A. BROWNE, Manufacturer, North Manchester, Indiana: "Ethics of Some Tragic Characters of Shakespeare".

March 15. Dr. WINFIELD S. HALL, Professor of Physiology, Northwestern University School of Medicine: "Eugenics".

April 5. Dr. SHAILER MATHEWS, Dean of the Divinity School, University of Chicago: "Militant Idealism".

April 6-10. LENTEN SERVICES: Sermons by pastors of the Twin Cities.

Oct. 4. Dr. WINFIELD S. HALL, Professor of Physiology, Northwestern University School of Medicine: "Social Problems and Sex Hygiene" (three lectures).

Dec. 17-20. Dr. FRANCIS J. MCCONNELL, Bishop of the Methodist Episcopal Church, Denver, Colorado: "Religious Certainty".

The Annual Bondurant Bible Lectures

March 16-20. Dr. GEORGE H. COMBS, Independence Boulevard Church, Kansas City, Missouri: "The Christ in Modern English Literature", "The Christ and the Social Problem", "The Christ and Our Native Land", "The Christ and the Hope of an Endless Life", "The Christ and the World's Great Questions".

The Illinois Farmers' Hall of Fame

Jan. 28. UNVEILING OF THE PORTRAIT OF MR. PHILIP D. ARMOUR.

The Illinois Municipal League

Oct. 15. Mr. L. D. UPSON, Bureau of Municipal Research, Dayton, Ohio: "The City Manager Plan"; Mr. WALTER A. SHAW, State Public Utilities Commission: "The Public Utilities Commission"; Mr. MONTAGUE FERRY, Commissioner of Public Services: "The Chicago Department of Public Service". (Other addresses by members of the faculty of the University of Illinois).

Woman's League Vocational Conference

March 27-28. Miss HELEN M. BENNETT, Manager, Chicago Collegiate Bureau of Occupations: "Opportunities for Women in Journalism"; Miss KATHERINE ALVORD, Mistress of Chadbourne Hall, University of Wisconsin: "Opportunities for Women in Public Service"; Miss S. P. BRECKENRIDGE, Chicago School of Civics and Philanthropy: "Opportunities for Women in Social Work"; Miss MAUDE RAYMOND, District Secretary, Y. W. C. A.:

"Opportunities for Women in Y. W. C. A. Work". (Addresses were also given by members of the faculty).

The Star Lecture Course

Jan. 9. The Ben Greet Players.
Jan. 27. Mr. William J. Burns, Private Detective.
March 20. Madame Schumann-Heink.
April 24. Kryell's Band.
Oct. 21. Madame Louise Homer.
Dec. 1. Hon. Robert M. La Follette.

Exhibitions

Jan. 13-29. Art Exhibit. A collection of seventy original paintings by prominent American artists, exhibited by the department of art and design.
Jan. 26-31. Household Science Exhibit. Exhibit of books on household science.
April 20-May 1. Architectural Exhibition. Mr. Edgar I. Williams: Restorations and water colors which won the competition for the Fellowship in the American Academy at Rome.
April 26. Floral Decoration and Landscape Design, Joint Exhibition. Held by the classes in floral decoration and landscape design.
May 12-16. Architectural Exhibition. Drawings from the departments of Architecture of Carnegie Institute of Technology, Cornell, Harvard, McGill, Pennsylvania, Syracuse, and Illinois, submitted in the interscholastic competition.
May 14-16. Public School Art Exhibit.
May 18-20. Architectural Exhibition. Work done by students in the department of architecture.
May 26-28. Architectural Exhibition. Drawings submitted by the seniors of the department of architecture for the Northwestern Terra Cotta Prize.
Oct. 10-15. Architectural Exhibition. Mr. Max A. Montgomery, Plym Fellow for the year 1913-14: Exhibition of envois and sketches which won the competition for the Fellowship. The drawings submitted in the final competition to decide the Plym Fellow for the year 1914-15 were also exhibited.
Oct. 23. Mechanical Engineering Exhibit. A comprehensive exhibit of the work of the department of mechanical engineering held under the auspices of Student Branch of the American Society of Mechanical Engineers.
Nov. 12-14. Architectural Exhibition. The best work done by the students in the department of Architecture.
Nov. 13-15. Chrysanthemum Show.
Nov. 20-24. Architectural Exhibition. Work by freshmen in the department of architecture. Held in connection with the High School Conference.
Dec. 15-17. Fruit Exhibit. Held in connection with the fifty-ninth annual convention of the Illinois Horticultural Society.

Entertainments

Jan. 16-17. Players' Club: "London Assurance", a comedy by Dion L. Boucicault.
Feb. 17. University Orchestral Concert: The St. Louis Symphony Orchestra, conducted by Max Zach.

Feb. 23. The Flonzaley String Quartet (under the auspices of the School of Music).

March 28. Mask and Bauble: "Higher Up", by Mr. T. H. Guild.

May 7. University Orchestral Concert: "The Minneapolis Symphony Orchestra, conducted by Emil Oberhoffer.

May 9. Players' Club: Two one-act plays, "The Portrait" and "Ryland".

May 14. May-Day Festival and Girls' Stunt Show.

May 15. Interscholastic Oratorical Contest.

May 16. Interscholastic Circus.

May 23. Hindu Night, Hindustani Students' Association.

Nov. 14-15. Mask and Bauble: "Our Wives".

Nov. 23. University Orchestral Concert: The St. Louis Symphony Orchestra, conducted by Max Zach.

Dec. 2. Mr. Charles Heinroth, Carnegie Institute, Pittsburg, Pennsylvania: Organ Recital. Dedication of Pipe Organ in the University Auditorium.

Dec. 15. Annual Concert, Choral and Orchestral Society: "The Messiah".

Dec. 18-19. Players' Club: Two plays by Thacher H. Guild, "The Power of a God", "The Higher Good".

THE COLLEGE OF LIBERAL ARTS AND SCIENCES

Anthropology

Nov. 8-13. Dr. Felix von Luschan, Professor of Anthropology and Director of the Anthropological Institute of the University of Berlin: "Excavations of a Hittite Capital", "Anthropology of Western Asia", "Culture and Degeneration," "Convergency or Transport and Migration".

Astronomy

April 2. Dr. John A. Brashear, Manufacturer of Astronomical and Physical Instruments, Pittsburgh, Pennsylvania: "The Contribution of Photography to Our Knowledge of the Stellar Universe".

Botany

April 24. Dr. Amon B. Plowman, Professor of Biology, Carroll College: "Studies on Negundo" (illustrated).

Nov. 9-13. Dr. Johanna Westerdjik, Willie Comnelin Scholten Phylopathological Laboratory, Amsterdam, Holland: "Tropical Plant Diseases", "Potato Vine Diseases", "Potato Tuber Diseases", "Fruit Diseases in Europe and America", "Some Problems in Plant Pathology and Methods of Meeting Them".

Business Administration

April 3. Insurance Conference. Mr. Courtney Barber, General Agent, Equitable Life Assurance Society: Mr. Isaac M. Hamilton, President, Federal Life Insurance Company; Hon. Rufus M. Potts, Insurance Superintendent; Dr. William F. Gephart, Professor of Economics, Washington University: Papers upon the general subject of "Life Insurance and Its Educational Relations". Presentation to the University of a portrait of the late Alonzo Weston Kimball, of the Northwestern Mutual Life Insurance Company.

Ceramics

Jan. 12-25. Industrial Course in Ceramics. Lectures, laboratory work, practise in firing kilns, and discussions under the direction of Professor Albert V. Bleininger, of the U. S. Bureau of Standards and Mr. R. T. Stull, Acting Director of the Courses in Ceramics.

Chemistry

Jan. 12-16. Dr. Karl Wilhelm Wolfgang Ostwald, Privat-Dozent, University of Leipzig: "What Are Colloids? Qualitative Colloid Analysis; Formation and Preparations of Colloids", "Mechanical, Optical, Electrical, and Chemical Properties of Substances in the Colloid State; Classification of the Colloids", "Changes in the Colloid State; Internal Changes of State, Smelling, Setting, Syneresis, Adsorption, Coagulation, Peptization," "General Survey of Colloid Chemistry", "Scientific Applications of Colloid Chemistry", "Technical Applications of Colloid Chemistry".

March 9-11. Annual Meeting, Illinois Water Supply Association. Addresses by prominent members of the Association.

April 21. Dr. C. A. Kraus, Research Laboratory of Physical Chemistry, Massachusetts Institute of Technology: "Solutions in Liquid Anhydrous Ammonia" (before the University of Illinois section of the American Chemical Society).

May 18. Dr. Ira Remsen, President, Johns Hopkins University: "Personal Reminiscences of Leibig and Woehler" (under the auspices of Phi Lambda Upsilon).

Nov. 17. Mr. William Hoskins, of Mariner and Hoskins, Chemical Engineers, Chicago: "The Methods Used and Some of the Results of the Recent Investigation of the Atmosphere of Chicago" (illustrated).

Education

Jan. 12-15. Mr. E. J. Gould, Lecturer and Demonstrator for the Moral Education League of London: A series of four lectures and demonstrations with a class of sixteen school-children between 11 and 13 years of age on the general subject of "Moral Education".

Feb. 16. Mr. C. S. Meek, Superintendent of City Schools, Boise, Idaho: Two lectures.

May 5-8. Dr. J. J. Findlay, University of Manchester, England: "Labor and Learning", "The Pursuits of Children at School", "History and Drama", "The Corporate Life of the School".

English

Oct. 27. Mr. A. Lancelot Artus, Author and Lecturer, London, England: "Hamlet, the Man of Genius".

Nov. 3-March 9. Informal Readings. Weekly reading hours, conducted by members of the department of English.

Nov. 4-5. Mr. Charles J. Woodberry, Author and Lecturer: "Emerson With His Friends", "Himself".

Entomology

Oct. 14. Dr. J. M. Aldrich, U. S. Bureau of Entomology: "Western Salt Lakes and Their Inhabitants".

Geology

Jan. 10. Dr. Ulysses S. Grant, Professor of Geology, Northwestern University: "Alaska".

Jan. 17. A Lecture by a representative of the Great Northern Railroad: "The New Glacier National Park".

German

Nov. 2. Dr. Eugen Kuehnemann, Breslau, Germany: "Deutschland und die Heutige Weltlager" (under the auspices of the Deutscher Verein).

Household Science

Nov. 21. Miss East, Household Science Supervisor, Philippine Islands: "Personal Experiences During My Work in the Philippines" (before students in the department of household science).

Mathematics

Jan. 16. Dr. Robert D. Carmichael, Associate Professor of Mathematics, Indiana University: "Convergence of a Special Class of Infinite Series" (before the Mathematical Society).

Sociology

April 27. Mr. F. Emory Lyon, Secretary Central Howard Association: "The Care of Discharged Prisoners and of Prisoners' Families".

Zoology

Feb. 27. Dr. Frank R. Lillie, Professor of Embryology, University of Chicago, and Director of the Marine Biological Laboratory, Woods Hole, Massachusetts: "The Marine Biological Laboratory and Its Importance in the Training of Research Students in Biology" (illustrated).

May 25. Mr. Henry Oldys, Lecturer, Writer, Bird Musician: "Birds and Bird Music".

Nov. 4. Dr. William E. Ritter, Professor of Zoology, University of California, and Director of the Scripps Institution for Biological Research: "The Work of the La Jolla Station" (before the graduate students and faculty in zoology).

THE COLLEGE OF ENGINEERING

College Assemblies

Jan. 13. Mr. Francis S. Peabody, President, Peabody Coal Company, Chicago: "The Mining and Utilization of Illinois Coal".

Jan. 22. Mr. Lewis Rowell, Assistant Professor of Electrical Engineering, Purdue University: "The Modern Battleship".

Jan. 26. Mr. George Whipple, Professor of Sanitary Engineering, Harvard University: "Sewage Disposal", "Relative Values in Sanitation".

Feb. 11. Mr. E. J. Mehren, Editor, *Engineering Record,* New York City: "The Making of a Technical Magazine".

Feb. 27. Mr. J. H. Prior, Engineer of Design, Chicago, Milwaukee and St. Paul Railway, Chicago: "How to Get Your First Job and Your Second One".

March 24. Mr. Fred H. Rindge, Secretary, Industrial Service Movement, Y. M. C. A., New York City: "Relation of the Engineer to Foreign Labor".

March 26. Mr. Stephen W. Gilman, Professor of Business Administration,

University of Wisconsin: "Practical Questions for Determination in Advance of Entering Into Business".

March 27. Mr. T. H. ALDRICH, Supervising Engineer, National X-Ray Company, Chicago: "Indirect Lighting Systems".

April 3. Dr. JOHN A. BRASHEAR, Manufacturer of Astronomical and Physical Instruments, Pittsburgh, Pennsylvania: "The Construction of Large Telescopes".

April 30. Mr. J. D. M. HAMILTON, Claims Attorney, Santa Fe System, Topeka, Kansas: "Safety First".

May 6. Mr. JOHN H. WALKER, President Illinois Federation of Labor, Springfield: "Collective Bargaining Between Employer and Employee".

May 11. Mr. B. F. BART, The National Tube Company, Chicago: "The Manufacturer of Steel Pipe".

Dec. 7. Mr. WILLARD BEAHAN, First Assistant Engineer, Lake Shore and Michigan Southern Railroad, Cleveland, Ohio: "The Engineering of Men".

Addresses Before the Freshman Class

April 8. Mr. FULLERTON FULTON, Superior Coal Company, Gillespie, Illinois: "First Aid to the Injured".

Architecture

March 20. Mr. WILLIAM JONES SMITH, Architect, Chicago: "The Character of Various Types of Buildings in the United States".

Civil Engineering

Jan. 19-31. TWO-WEEKS COURSE IN HIGHWAY ENGINEERING. Lectures and discussions by prominent highway engineers, with exhibits and demonstrations of road machinery.

Dec. 12. Mr. ALFRED NORBURG, Civil Engineer: "Frisco Harbor Construction" (before the C. E. Society).

Electrical Engineering

Feb. 14. Mr. F. H. MILLENER, Experimental Engineer, Union Pacific Railroad, Omaha, Nebraska: "Light Waves, Visible and Invisible".

March 27. Mr. T. H. ALDRICH, Supervising Engineer, National X-Ray Company, Chicago: "Interior Illumination".

Mechanical Engineering

April 16. Mr. A. KOEHLER, of The B. F. Goodrich Company, Akron, Ohio: "The Manufacture of Rubber".

Mining Engineering

Jan. 13. Mr. F. S. PEABODY, President, Peabody Coal Company, Chicago: "Coal Mining in Illinois" (illustrated with motion pictures).

Feb. 4. Mr. A. J. ROSSBACH, Sullivan Machinery Company, St. Louis, Missouri: "Coal Cutting Machines and Rock Drills".

Feb. 24. Mr. BRADLEY STOUGHTON, Secretary, American Institute of Mining Engineers, New York City: "Notes on the Metallurgy of Steel".

March 13. Mr. THOMAS D. HALL, Ladybrand, South Africa: "Mining Conditions in South Africa".

April 18. Mr. A. N. WINCHELL, Professor of Mineralogy, University of Wisconsin: "Geology and Mining of the Butte District".

May 5. Mr. L. C. Hodson, Assistant Professor of Mining, Iowa State College: "Mining in the Lake Superior Region".

May 6. Mr. John H. Walker, President, Illinois Federation of Labor: "Cooperative Bargaining in the Mining Industry".

Physics

Dec. 9. Dr. A. G. Worthing, Cleveland, Ohio: "Optical Pyrametry" (before the Physics Colloqium).

Railway Engineering

Feb. 20. Mr. G. E. Jacquet, Urbana: "Some Experiences With an Eastern Railway".

March 27. Mr. R. S. Zeitler, Urbana: "Self-Propelled Railway Cars".

THE COLLEGE OF AGRICULTURE

Agricultural Extension

(Addresses before the Corn Growers' and Stockmen's Convention.)

Jan. 19. Mr. George O. Shields, President, League of American Sportsmen: "Wild Animals and Birds"; "Timber That Grows at Timber Line" (illustrated).

Jan. 20. Mr. Charles Rourke, President, Urbana Commercial Club: "Progress in Business Methods".

Jan. 21. Mr. Frank Stockdale, International Harvester Company: "The Dawn of Plenty".

Jan. 22. Mr. B. F. Harris, Ex-President, Illinois Bankers' Association: "Application of Business Principles to Farming".

Jan. 23. Mr. Willis B. Mills, McNabb, Illinois: "Corn; Preparation of the Ground and Cultivation".

Jan. 26. Mr. A. J. R. Curtis, Universal Portland Cement Company: "Concrete and Its Uses on the Farm".

Jan. 26. Reverend M. B. McNutt, Naperville, Illinois: "The Pastor as a Community Engineer".

Jan. 27. Mr. Charles Galpin, Instructor in Agricultural Economics, University of Wisconsin: "Problems in Agricultural Economics".

Jan. 27. Dr. Ross L. Finney, Professor of Education, Philosophy, Religion and Social Science, Illinois Wesleyan University: "Some Problems of the Country Church".

Jan. 27. Miss Mabel Carney, Director of Country School Department, Illinois State Normal University: "The New Country School".

Jan. 28. Dr. G. C. Creelman, President, Ontario Agricultural College: "Some Rural Problems".

Jan. 29. Mr. Fred L. Hatch, Spring Grove, Illinois: "Alfalfa".

Jan. 29. Mr. Horace F. Major, Assistant Professor of Landscape Gardening and Superintendent of Grounds, University of Missouri: "Landscape Gardening for the Farmer".

Jan. 30. Mr. Carl J. Rohrer, Schenectady, New York: "Application of Electricity to Farm Work".

Jan. 30. Mr. Frank I. Mann, Gilman, Illinois: "Soil Fertility".

(Addresses given in connection with agricultural extension courses 4 and 5.)

Feb. 27. Mr. W. N. Rudd, President, Mt. Greenwood Cemetery Association, Morgan Park, Illinois: "The Grounds and Setting of a House".

March 6. Mr. CHARLES MCLEAN, Dubuque, Iowa: "Problems of Central Marketing".

March 13. Mr. J. O. FINDLEY, Oneida, Illinois: "Commercial Sheep Feeding".

March 20. Hon. A. N. ABBOTT, Morrison, Illinois: "The Advances in Agriculture in the Last Fifteen Years".

April 24. Dr. SHOSUKE SATO, President, College of Agriculture, North Eastern Imperial University of Japan: "Land Tenure Systems of Japan and Great Britain".

Agronomy

March 24. Mr. A. G. SMITH, U. S. Department of Agriculture, State Leader of County Advisers in Illinois: "The County Agricultural Adviser and His Work".

April 7. Mr. F. I. MANN, Gilman, Illinois: "Growing Legumes".

Animal Husbandry

March 5. Mr. CHARLES MCLEAN, of the City Market, Dubuque, Iowa: "Municipal Markets".

March 24. Mr. H. L. HALVERSON, Manager, Farmers' Shipping Association, Ltichfield, Minnesota: "Work of the Farmers' Shipping Association".

March 26. Mr. F. S. BROOKS, General Live Stock Agent, Santa Fe Railway: "Transportation of Live Stock".

April 2. Mr. J. E. POOLE, *Chicago Live Stock World:* "Organization of the Live Stock Markets".

April 9. Mr. JAY R. BROWN, *Chicago Farmers' and Drovers' Journal:* "Market Reports and Their Use".

April 14. Mr. M. J. WRIGHT, Woodstock, Illinois: "Marketing Milk and Its Products".

May 14. Mr. SIDNEY B. SMITH, Ex-Secretary of the Illinois Live Stock Breeders' Association: "Public Sale Method of Selling Pedigreed Live Stock".

May 21. Mr. A. J. LOVEJOY, Roscoe, Illinois: "How to Sell Pedigreed Live Stock".

May 26. Mr. E. C. STONE, *The Swine World:* "Advertising of Pedigreed Live Stock".

Horticulture

Jan. 23. Mr. THEODORE WIRTH, Superintendent of Parks, Minneapolis, Minnesota: "The Minneapolis Park System".

Feb. 18. Mr. W. N. RUDD, President, Mt. Greenwood Cemetery Association, Morgan Park, Illinois: "The Value of Landscape Gardening to the Cemetery".

Feb. 25. Mr. O. C. SIMONDS, Landscape Architect, Chicago: "The Training of a Landscape Architect".

March 25. Mr. F. N. EVANS, Landscape Architect, Cleveland, Ohio: "The Plants of California".

April 22. Mr. BREMER W. POND, Landscape Architect, Boston, Massachusetts: "American Country Estates".

Dec. 16-18. Mr. THOMAS BENDELOW, Golf Course Architect: "Selections of Site of Golf Courses," "Laying Out Golf Courses," "The Planting and Landscape Gardening of Golf Courses."

Household Science

Oct. 19. Mrs. FLORENCE KELLEY, General Secretary, National Consumers' League: "History and Progress of the National Consumers' League."

THE COLLEGE OF LAW

May 6. Hon. WALTER J. GRANT, Referee in Bankruptcy, U. S. District of Eastern Illinois: "Troubles of a Referee, and How to Relieve Them".

May 29. Mr. HENRY W. BALLANTINE, Professor of Law, University of Wisconsin: "Proclamations of Martial Law".

Dec. 9-10. Mr. NATHAN W. MACCHESNEY, Senior Member of Law Firm of MacChesney and Becker, Chicago: "Legal Ethics".

THE LIBRARY SCHOOL

Jan. 22-23. Mr. HENRY E. LEGLER, Librarian, Chicago Public Library: "Recent Developments in Legislative and Municipal Reference Work", "Books Our Grandmothers Read", "The Chicago Public Library and the Playground Movement".

April 2-3. Miss MARY E. AHERN, Editor of *Public Libraries,* Chicago: "The Fifth Kingdom and the Keeper of Its Treasures", "The Business of Being a Librarian".

April 7. Miss MAY MASSEE, Editor, *A. L. A. Booklist:* "The Aim of the A. L. A. Booklist".

April 8. Miss HARRIET E. HOWE, Instructor, Western Reserve University Library School: "Special Phases of Training Carried On by the Western Reserve University Library School".

April 16. Mr. CHARLES E. RUSH, Librarian, St. Joseph, Missouri Public Library: "Children's Books and Their Illustrators".

April 24. Miss CARRIE E. SCOTT, Assistant Secretary, Indiana Library Commission: "The Work of the Indiana Library Commission".

April 28. Mr. MATTHEW S. DUDGEON, Director, University of Wisconsin Library School: "The Work of the Wisconsin Library Commission", "Legislative Reference".

Oct. 16-17. Mr. AZARIAH S. ROOT, Librarian and Professor of Bibliography, Oberlin College: "European Libraries", "Bibliography in Colleges".

Oct. 29. Miss LUTIE E. STEARNS, Wisconsin Library Commission: "Some Western Phases of Library Work", "The Library and the Social Survey".

Nov. 13. Mr. JAMES I. WYER, Jr., Director, New York State Library: "Librarianship", "The New York State Library" (illustrated).

Dec. 1. Miss MARY E. HALL, Librarian of the Girls' High School, Brooklyn, New York: "The Opportunity of the High School Library".

THE SCHOOL OF MUSIC

Mr. J. LAWRENCE ERB, Director of the School of Music: Weekly organ recitals. Student and faculty recitals given throughout the year.

THE SUMMER SESSION, 1914

Lectures and Demonstrations

June 29. Rev. J. C. BAKER, Pastor, Trinity Methodist Church, Urbana: "Some Books Relating to Religious Problems".

July 6-10. Mr. J. ADAMS PUFFER, Boston, Massachusetts: "Vocational Education".

July 14-17. Dr. PETER ROBERTS, International Secretary, Y. M. C. A., New York City: "Outline of Program for Helping a Community of Foreigners", "Detailed Method of Teaching English to Foreigners", "Requirements in Teachers Teaching Foreigners", "The Foreigner and His Needs" (illustrated), "Ethnic Factors in Immigrants", "How to Start to Work for Foreigners", "The Foreigner As an Asset to Industrial Communities".

July 22. Mr. JOHN R. RICHARDS, Superintendent of Play Grounds, South Park System, Chicago: "Municipal Recreation" (illustrated).

July 27-28. Dr. FRANK C. SHARP, Professor of Philosophy, University of Wisconsin: "Moral Education".

July 30-31. Dr. J. H. KAPLAN, Rabbi, Temple Israel, Terre Haute, Indiana: "Creative Judaism (before the Christian era)".

Convocation

Aug. 7. Hon. FRANCIS G. BLAIR, Superintendent of Public Instruction: Address.

July 31. Dr. LAFAYETTE B. MENDEL, Professor of Physiological Chemistry, Yale University: "Some Recent Advances in Animal Nutrition".

Entertainments

July 18. BEN GREET PLAYERS: "She Stoops to Conquer", "Midsummer Night's Dream".

ASSOCIATIONS, SOCIETIES, AND CLUBS

GENERAL ORGANIZATIONS

The Alumni Association

The Alumni Association is the general organization of the Alumni of the University. The Association maintains an office at the University and publishes two periodicals, the *Alumni Quarterly* and the *Fortnightly Notes.* The alumni of the colleges and schools of the University have formed departmental organizations. Local Alumni Associations have also been organized in many places. (See the Directory of Alumni Associations at the end of this volume.)

University of Illinois Union

The University of Illinois Union is an association of the men of the University, having for its general object the promotion of college spirit and good fellowship. The Union has purchased a house which is open to all university men. All male students are eligible to active membership in the Union; alumni and members of the faculty may become associate members. The Union elects annually a Student Council, consisting of eight seniors and seven juniors, which takes charge of certain student activities.

The Woman's League

The Woman's League was organized to further the spirit of unity among the women of the University and to be a medium for the maintenance of high social standards. The administrative power is vested in an Advisory Board and an Executive Committee composed of representatives from the various women's organizations. Every woman in the University is, by virtue of her registration, a member of the League. The League manages a loan fund, supports a room in the Burnham Hospital, and provides the magazines for the Woman's Building.

Hospital Organization

1. The Students' Mutual Benefit Hospital Fund is a fund made up of contributions from students not otherwise connected with the University.
2. The amount of contribution from each student is $1.00 a semester.
3. The payment of $1.00 is due at the opening of each semester, and members are not received later than three weeks after the first day of registration in any semester. Payment confers benefits to the end of the semester in which payment is made.
4. By consent of each member, which consent is acknowledged by the payment of a semester contribution, the fund is paid to the Dean of Men as trustee. This trustee is liable to the members for the proper disbursement of the fund for the purpose for which it is collected, and only to the amount collected.
5. The purpose of the fund is to provide ward hospital care at the rate of $2.00 a day for members who become ill and need such care for a period of time

not to exceed four weeks during any semester. No payment is made for the expense of a special nurse, or for a physician's bill. The obligation of the trustee is to the contributors to the fund, and not to the hospital. Payment is made only if the beneficiary is in good health when he makes his contribution, and persons paying within the period of the incubation of an infectious disease are not entitled to the benefits of the fund.

6. The trustee has custody of the fund and makes all payments.

7. The trustee reports annually on the operation of the fund, and renders an accounting to the Council of Administration at the first regular meeting of that body in September of each year. The Council of Administration receives this report and asks the Comptroller of the University to audit the accounts for presentation at its first meeting in September; spreads the report upon its records so that the proceedings of the trustee may be permanently preserved, and publishes the essential facts of the annual report in the *Daily Illini.*

Literary Societies

The ADELPHIC, IONIAN, and PHILOMATHEAN societies for men, and the ALETHENAI, ATHENIAN, ILLIOLA, and GREGORIAN societies for women, meet weekly, on Fridays, and the JAMESONIAN on Tuesdays, throughout term time.

The Christian Associations

The present membership of the Young Men's Christian Association is 1,033. The Association building furnishes free, for the use of all students, lounging room and library, parlors, organization rooms for committee meetings, correspondence tables, check room, etc. The building also contains game rooms, bowling alleys, and dormitories to accommodate ninety men. A cafeteria, whose manager is on the pay roll of the Association, serves 450 to 500 persons daily. Religious meetings for men are held occasionally on Sunday afternoon. Thursday evening meetings are addressed by prominent faculty members on ethical topics. Student-led classes in Bible Study are promoted, the teachers receiving training in normal groups. In 1913-14 there were 1,030 men enrolled in voluntary Bible Study. An employment bureau managed by a special secretary, who maintains office hours every afternoon in the Association building, endeavors to help students to find work.

The Y. W. C. A. is housed in Hannah McKinley building. Dormitory space is provided for fifty young women. There are parlors on the first floor for use of the women rooming in the house, a large assembly room, and free use of pianos, organization rooms, and correspondence tables. A bowling alley and modern dining room are in the basement. There are 360 members of the Y. W. C. A. In 1913-14 there were 360 young women enrolled in voluntary Bible Study. An employment bureau is maintained at the Y. W. C. A. to help University women to find employment.

At the opening of the college year the Associations endeavor to help new students to find desirable rooming and boarding places. A copy of the Students' Handbook, giving information about Urbana and Champaign, the University, and the various college organizations and activities will be sent free to prospective students. For this handbook or for further information address the general secretary of either Association.

The Cosmopolitan Club

The Cosmopolitan Club is an organization devoted to the promotion of

social and intellectual intercourse among persons of different nationalities at the University. Public meetings are held in University buildings, to afford the University community information about the customs peculiar to the various countries of the world. The clubhouse on Daniel street affords a home to many foreign students and to a limited number of native students.

Ma-Wan-Da

Ma-Wan-Da is a senior society formed by the consolidation of two former senior societies, Shield and Trident, and Phenix.

HONORARY SOCIETIES

The honorary societies or fraternities named below are private intercollegiate organizations of students and graduates, having for their primary purpose the recognition and encouragement of excellence in scholarship in various departments of study. Election is in all cases made by the societies themselves in accordance with their own rules. The University assumes no responsibility for their elections.

Phi Beta Kappa

Each year a certain number of the ranking students of the senior class in the College of Liberal Arts and Sciences are elected to membership in the Phi Beta Kappa Society. The number is ordinarily limited to one-fifth of the total membership of the graduating class.

The Phi Beta Kappa Prize

Gamma of Illinois chapter of Phi Beta Kappa offers annually a prize of $25.00 to that member of Gamma Chapter who at his graduation from the College of Liberal Arts and Sciences gives evidence of greatest promise as a scholar in the domain of liberal arts. The award is based on the following considerations: (a) Class room records; (b) other literary and scholarly activities in the University; (c) an essay, which may be a senior thesis or a term paper. At the discretion of the committee in charge, the award may be withheld if none of the essays appears worthy of the prize. Essays submitted in competition and all correspondence with reference to this prize should be addressed to the Secretary of the Phi Beta Kappa Society, University of Illinois.

Sigma Xi

Members of the senior class who give "promise of marked ability" in scientific investigations are eligible to membership in the Sigma Xi Society, which was founded to encourage research in pure and applied science.

Other Honorary Societies

Alpha Chi Sigma (Chemical); Alpha Delta Sigma (Advertising); Alpha Gamma Rho (Agricultural); Alpha Rho Chi (Architectural); Alpha Zeta (Agricultural); Beta Gamma Sigma (Commercial); Delta Sigma Rho (Oratorical); Eta Kappa Nu (Electrical Engineering); Gamma Alpha (Scientific); Kappa Delta Pi (Educational); Order of the Coif (Law); Phi Alpha Delta (Law); Phi Delta Phi (Law); Phi Lambda Upsilon (Chemical); Scabbard and Blade (Military); Scarab (Architectural); Sigma Delta Chi (Journalistic); Sigma Mu Rho (Medical); Sigma Tau (Engineering); Tau Beta Pi (Engineering); Triangle (Civil Engineering); U. L. A. S. (Landscape Architecture).

CLUBS AUXILIARY TO COURSES OF STUDY

In addition to the associations and societies of a general character described above, there are in each college a number of societies and clubs devoted to outside work of a literary, scientific, or technical nature auxiliary to the work of various departments of that college. Among these are the following:

In the COLLEGE OF LIBERAL ARTS AND SCIENCES: The Botanical Club, the Ceramic Club, *le Cercle Francais, el Circulo Español,* the Chemical Club, the University of Illinois Section of the American Chemical Society, the Classical Club, the Commercial Club, *der Deutsche Verein,* the English Journal Club, the Geological Journal Club, the History Club, the Mathematical Club, the Oratorical Association, the Pen and Brush Club, the Philological Club, the Political Science Club, the Romance Journal Club, the Scandinavian Club, the Zoological Club.

In the COLLEGE OF ENGINEERING: The Architectural Club, the Civil Engineers' Club, the Electrical Engineering Society, the Urbana Section of the American Institute of Electrical Engineers, the Student Branch of the American Society of Mechanical Engineers, the Student Branch of the American Institute of Mining Engineers, the Physics Colloquium, the Railway Club.

In the COLLEGE OF AGRICULTURE: The Agricultural Club, the Horticultural Club, the Household Science Club, the Landscape Gardeners' Club.

In the SCHOOL OF MUSIC: The University Choral and Orchestral Society, the University Glee and Mandolin Club, the University Military Band.

In the LIBRARY SCHOOL: The Library Club.

FRATERNITIES, SOCIETIES, AND CLUBS

National Fraternities.—Acacia (Masonic); Alpha Delta Phi; Alpha Kappa Psi; Alpha Sigma Phi; Alpha Tau Omega; Beta Theta Pi; Chi Phi; Chi Psi; Delta Kappa Epsilon; Delta Tau Delta; Delta Upsilon; Kappa Sigma; Phi Delta Theta; Phi Gamma Delta; Phi Kappa; Phi Kappa Psi; Phi Kappa Sigma; Phi Sigma Kappa; Psi Upsilon; Sigma Alpha Epsilon; Sigma Chi; Sigma Nu; Sigma Pi; Tau Kappa Epsilon; Theta Delta Chi; Zeta Beta Tau; Zeta Psi.

Sororities.—Achoth (Eastern Star); Alpha Chi Omega; Alpha Delta Pi; Alpha Omicron Pi; Alpha Xi Delta; Chi Omega; Delta Gamma; Gamma Phi Beta; Kappa Alpha Theta; Kappa Kappa Gamma; Phi Beta; Pi Beta Phi; Sigma Kappa.

Local Clubs.—Chi Beta; Chi Delta; Delta Omega; Ilus; Iris; Pi Omicron; Psi Delta.

Interfraternity Organizations.—Men's Pan Hellenic Council; Girls' Pan Hellenic Association; Helmet; Yo Ma; Phi Delta Psi.

OTHER ORGANIZATIONS

Other students' societies include the following: Arkansas Club; Chinese Students' Club; Culver Club; Dixie Club; Easterners' Club; Egyptian Club; H. H. Club; Ivrim; Kansas Club; Komenian Society; Lambkins' Club (Interfraternity Dramatic); Lincoln League; Mask and Bauble (Dramatic); Motorcycle Club; Scribblers' Club; Sewanee Circle; Shomeez (Interfraternity Missouri Club).

UNDERGRADUATE SCHOLARSHIPS

(For circulars giving more detailed information concerning these scholarships, apply to the Registrar of the University.)

COUNTY SCHOLARSHIPS

A law passed by the General Assembly of the State of Illinois at the session of 1905 and embodied in the General School Law of 1909 provides that one scholarship may be awarded annually to each county of the State. The holder thereof must be at least sixteen years of age, and a resident of the county to which he is accredited. No student who has attended the University of Illinois is eligible for a scholarship. The holder of a scholarship is relieved of payment of the matriculation fee ($10.00, payable once, upon entrance) and incidental fees for four years ($24.00 a year) in any department of the University other than the professional schools. The term "professional schools," as here used, includes the College of Law, the Library School, the College of Medicine, the College of Dentistry, and the School of Pharmacy.

A competitive examination, under the direction of the President of the University, and upon such branches of study as the President may select, is held, upon the first Saturday in June of each year, at the county court house in each county by the County Superintendent of Schools. Questions for the examinations are furnished in advance to the County Superintendents.

The successful candidates in the examinations must then meet in full, either by certificate from an accredited high school or by passing entrance examinations at the University, the requirements for admission to the freshman class, and must register the following September.

In case the scholarship in any county is not claimed by a resident of that county, the President of the University may fill the same by assigning to that county from some other county the student found to possess the next highest qualifications.

A student holding a scholarship who shall make it appear to the satisfaction of the President of the University that he requires leave of absence for the purpose of earning funds to defray his expenses while in attendance, may, in the discretion of the President, be granted such a leave of absence, and may be allowed an extension of his scholarship for not more than two years (making not more than six years in all from the beginning of the scholarship). Such extension will not be granted unless the student has been in attendance at the University for at least one full semester, nor unless the student's average grade during the period of his attendance has been at least 80 per cent, exclusive of grades in military science and physical training.

GENERAL ASSEMBLY SCHOLARSHIPS

The same act by which the county scholarships described above were established also provides that each member of the General Assembly may nominate

annually one eligible person from his district for a scholarship in the University, granting the same privileges as the county scholarships.

A member of the General Assembly who wishes to nominate a candidate for a scholarship should file the name and address of his nominee as early in the spring as practicable and not later than June 1, with the President of the University and also with the County Superintendent of the county in which the nominee resides.

The nominee is then required, under the statute, (1) to pass the scholarship examination—the same that is given to competitors for the county scholarships on the first Saturday in June, under the County Superintendent; (2) to meet in full, either by certificate from an accredited high school or by passing entrance examinations at the University, the requirements for admission to the freshman class; and (3) to register in the University the following September.

If a nominee fails to make a passing grade (70) in the scholarship examination he may not receive the scholarship. In this case notice will be sent to the member of the General Assembly who made the nomination, who is then entitled to nominate a second candidate. This second candidate is subject to all the requirements stated above; the scholarship examination will be given him at the University on the Wednesday preceding the fall registration days (in 1915, September 15).

A General Assembly scholarship may be extended under the same conditions as a county scholarship.

SCHOLARSHIPS IN CERAMICS

The University offers annually to each county in the State one scholarship, awarded by the Trustees of the University, upon the nomination of the Illinois Clay Workers' Association, to applicants who intend to pursue either of the courses in ceramics (Ceramics, and Ceramic Engineering). These scholarships are good for four years and relieve the student from the payment of the matriculation fee ($10.00, payable once, upon entrance) and the incidental fees ($24.00 a year).

The candidate must be at least sixteen years of age, must be a resident of the county for which he is nominated, and must meet *in full, before entering,* by certificate from an accredited high school or by passing entrance examinations at the University, the requirements for admission to the freshman class.

SCHOLARSHIPS IN AGRICULTURE AND HOUSEHOLD SCIENCE

The University offers every year to each county in the State, except Cook and Lake, and to each of the first ten congressional districts, one scholarship for prospective students of agriculture in the College of Agriculture and one for prospective students of household science in the College of Liberal Arts and Sciences or the College of Agriculture.

Appointments to scholarships in agriculture are made by the Trustees of the University upon the recommendation of the Executive Committee of the Illinois Farmers' Institute; and to scholarships in household science upon the recommendation of the County Domestic Science Associations, or, for counties and districts in which there are no domestic science associations, on the recommendation of the Illinois Farmers' Institute. Persons who have already attended the University are not eligible.

Candidates who are able to meet in full the requirements for admission to the freshman class are eligible to appointment at 16 years of age. Candidates who cannot meet these entrance requirements are eligible to appointment as special students (in the College of Agriculture) at 21 years of age.

Acceptable candidates, residents of counties or districts for which appointments have been made, not exceeding five in number from any one county or district, may be assigned to counties or districts for which no recommendations are made. The first nominee from each county or district, if duly qualified, is awarded the scholarship at the time of registration. Other nominees must pay the regular fees on registration. Assignments to counties and districts for which there are no nominees registered are made on October 15, at which time the nominees so assigned to counties or districts other than their own receive rebates of the full amount of the matriculation and incidental fees paid.

The scholarships are good for two years and relieve the holders from the payment of the matriculation fee ($10.00, payable once, upon matriculation), and the incidental fees ($24.00 a year). If, before a scholarship expires, the holder satisfies in full the requirements for admission to the freshman class of the college in which he or she is enrolled the term of the scholarship may be extended to four years from the date of the student's matriculation.

MILITARY SCHOLARSHIPS

Students who have had three semesters of class instruction in military science and four semesters of drill practise are eligible for appointment as commissioned officers of the University Corps of Cadets. To those attaining this rank, special military scholarships, good for one year, and equal in value to the university incidental fees for the year, are open. The amount of these scholarships is paid to the holders at the close of the academic year. Appointments in the Corps of Cadets are made on the recommendation of the Commandant of Cadets, confirmed by the Council of Administration.

OTHER SCHOLARSHIPS

For *scholarships in the College of Law,* see page 218.

For *scholarships in the Summer Session,* see page 212.

For *fellowships and graduate scholarships,* see under Graduate School, page 193.

BENEFICIARY AID

EDWARD SNYDER DEPARTMENT OF STUDENTS' AID

In 1899 Edward Snyder, Professor of the German Language and Literature, *Emeritus,* gave the University the sum of $12,000, to be lent to worthy students to enable them to finish their courses in the University.

This fund is available for junior, senior, and graduate students who need aid to remain and complete their work. The minimum loan made is fifty dollars ($50); the maximum loan is one hundred and fifty dollars ($150) to a junior, and two hundred dollars ($200) to a senior or graduate student. Notes of hand are taken for the amount of the loans, with 5 per cent interest. The maximum time limit is for juniors three years and for seniors and graduates two years from the ensuing thirtieth of June.

Loans are made only to matriculated students who have attained at least the full rank of junior, who have been in residence at the University at least one year, who are at the time students in residence at the University, and who have declared their intention to graduate.

In recommending loans, preference is given to those students who are most advanced in their university work, who have shown themselves most assiduous and successful in their studies, and have shown habitual economy in living. No distinction is made on account of sex or course of study. A loan will not be recommended for any student who is believed to have been financially or morally delinquent in any respect.

Applications for loans must be made in writing and addressed to Dean Thomas Arkle Clark, Chairman of the Loan Fund Committee.

CLASS OF 1895 LOAN FUND

A fund of $100.00 was established by the class of 1895, to be lent to needy and deserving students. According to the conditions of the gift, the sum of fifty dollars is to be lent annually, and the benefit of the fund is open only to students who, at the time of application, are members of the freshman class. No person may receive the benefit of the fund more than four years. The loan bears interest from the time the recipient leaves the University, and is due one-half in five years and one-half in six years after matriculation. The fund is in charge of the Loan Fund Committee of the Council of Administration. Applications should be made in writing and should be addressed to Dean Thomas Arkle Clark, Chairman of the Committee.

GRADUATE CLUB LOAN FUND

A fund of $75 was established by the members of the Graduate Club in 1907-1908, for the benefit of graduate students. Its administration is in the hands of the Loan Fund Committee of the Council of Administration. Applications should be made in writing and should be addressed to Dean Thomas Arkle Clark, Chairman of the Committee.

WILLIAM B. M'KINLEY LOAN FUND

In September, 1912, the Hon. William B. McKinley of Champaign, Illinois, turned over to the University notes aggregating something more than $12,000, this amount as it is collected to be used as a loan fund for undergraduate men. In making the donation, Mr. McKinley stipulated that loans should be made to students upon their own personal notes, and that a preference should be shown in making these loans to upperclassmen. The notes draw interest at 5 per cent and become due two years after the student's graduation. Applications for loans should be made in writing and should be addressed to Dean Thomas Arkle Clark, Chairman of the Loan Fund Committee.

HENRY STRONG LOAN FUND

Mr. Gordon Strong, of Chicago, trustee of the Henry Strong Educational Fund, has for 1914-15 offered the University $500 to be loaned to self-supporting students of high scholastic attainments. The loan bears interest at 4 per cent and is payable within one year after graduation. The fund has been loaned to two students, each of whom received $250.

FEES AND EXPENSES

GENERAL FEES

All University fees are payable each semester in advance.

Colleges of Liberal Arts and Sciences, Engineering, and Agriculture, and Library School

Matriculation Fee. Each student not holding a scholarship, upon satisfying the requirements for admission to the University, pays the matriculation fee of.....$10.00

Incidental Fee. All students, excepting those holding scholarships, pay, each semester, an incidental fee of..... 12.00

Tuition Fee. Students conditioned on entrance requirements, and special students, except special students holding scholarships, pay, each semester, a tuition fee of..... 7.50

Laboratory Fees. Each student working in laboratories, or in the drafting or engineering classes, is required to pay a fee varying from $1.00 to $10.00, to cover materials and apparatus used and breakages or damages. (For a list of Laboratory Fees, see page 120.)

Deposit for Military Uniform. Male students, citizens of the United States, under 25 years of age, entering the University as freshmen or sophomores, make a deposit to cover the cost of the required military uniform of..... 16.20

Listener's Fee. Persons not connected with the University who attend classes as listeners, or for credit, pay for each course, each semester 7.50

Late Registration Fee. A former student who enters after the Registration Days in either semester must pay a late registration fee of..... 1.00

Change Fee. For every change of study-list made later than the tenth day of instruction of either semester a fee of $1.00 is charged, except that the total charge for the rearrangement authorized on any one change-slip may not exceed $2.00..... 1.00

Special Examination Fee. For any special examination, the fee is..... 5.00

Diploma Fee 5.00

School of Music

College Courses

Matriculated students, residents of Illinois, pay, each semester, the incidental fee $12.00

Non-matriculated students registered for the course in *Public School Methods,* as outlined on page 199, pay, each semester:

(1) The incidental fee $12.00

(2) The tuition fee 7.50

All other students (including matriculated students not residents of Illinois and all conditioned and special students), pay, each semester:

If they take music only, special music fees, as follows:

For two lessons a week.....$32.50
For one lesson a week..... 19.50
For harmony, counterpoint, fugue, etc..... 9.00

If they take, in addition to music, subjects in other departments:

(1) The incidental fee.....$12.00
(2) Unless matriculated, the tuition fee..... 7.50
(3) Special music fees, as follows:
For two lessons a week.....$25.00
For one lesson a week..... 15.00
(4) For harmony, counterpoint, fugue, etc..... 9.00

Preparatory Courses

Students taking music only pay, each semester, special music fees as follows:

For two lessons a week.....$19.50
For one lesson a week..... 11.00

Students taking, in addition to music, subjects in other departments pay, each semester:

(1) The incidental fee.....$12.00
(2) Unless matriculated, the tuition fee..... 7.50
(3) Special music fees, as follows:
For two lessons a week.....$15.00
For one lesson a week..... 8.50

Additional

Use of a piano for practise one hour a day, each semester.....$ 3.00
Additional hours at the same rate.
Special students, taking music only, may enter classes in physical training on paying, each semester..... 7.50

College of Law

Matriculation fee, payable upon satisfying the entrance requirements....$ 10.00
Tuition fee, each semester..... 25.00
Students conditioned on entrance requirements pay, each semester, an additional fee of 7.50
Students not enrolled in the College of Law pay, each semester, for each law course 5.00

College of Medicine

Matriculation fee, each year.....$ 5.00
General ticket, freshman and sophomore years, each..... 120.00
Junior year 140.00
Senior year 155.00
Laboratory deposit, freshman and sophomore years, each..... 20.00
Junior year (there is no deposit in the senior year)..... 5.00

College of Dentistry

Matriculation fee, each year	$ 5.00
Tuition, each year (including laboratory and dissection fees)	150.00

School of Pharmacy

Matriculation fee, paid but once	$ 5.00
Tuition fee, shorter course, each year	75.00
Tuition fee, longer course, each year	125.00
Laboratory deposit, shorter course, each year	10.00
Laboratory course, longer course, each year	15.00
Diploma fee	5.00

LABORATORY FEES (FOR MATERIALS) 1914-1915

(The fees given below are in each case for one semester only; where a course runs through both semesters, the fee named is to be paid each semester.)

Animal Husbandry 30	$ 1.00
Architecture 6a	1.50
Architecture 6b	1.50
Architecture 10	1.00
Architecture 13	1.00
Architecture 14	1.00
Architecture 15	1.00
Architecture 16	1.00
Architecture 19a	1.50
Architecture 31	1.00
Architecture 32	1.00
Architecture 43	1.00
Architecture 44	1.00
Architecture 45	1.50
Architecture 46	1.50
Architecture 57	1.00
Architecture 68	1.50
Architectural Engineering 31	1.00
Architectural Engineering 43	1.00
Architectural Engineering 44	1.00
Architectural Engineering 45	1.50
Architectural Engineering 46	1.50
Architectural Engineering 47	1.50
Architectural Engineering 48	1.50
Architectural Engineering 68	1.50
Bacteriology 5	7.50
Bacteriology 6	4.00
Bacteriology 8	6.00
Bacteriology 19	7.50
Bacteriology 26	5.00
Bacteriology 103	3.00
Bacteriology 105	3.00
Botany 1	2.00
Botany 2a	1.50
Botany 2b	1.00
Botany 3a	3.00
Botany 3b	2.00
Botany 4	1.00
Botany 4a	1.00
Botany 4b	1.00
Botany 6	(See Bact.)
Botany 7a	3.00
Botany 7b	3.00
Botany 8	(See Bact.)
Botany 9a (per hr.)	.50
Botany 9b (per hr.)	.50
Botany 10a	1.00
Botany 10b	1.00
Botany 12	2.00
Botany 15a (per hr.)	.50
Botany 15b (per hr.)	.50
Botany 16a	1.00
Botany 16b	1.00
Botany 17a	1.00
Botany 17b	1.00
Botany 19	(See Bact.)
Botany 20	1.00
Botany 26	(See Bact.)
Botany 101	3.00
Botany 102	3.00
Botany 103	(See Bact.)
Botany 104	3.00
Botany 105	(See Bact.)
Botany 106	4.00
Botany 107	3.00
Ceramics 1	2.00
Ceramics 5	5.00
Ceramics 6	5.00
Ceramics 11	5.00
Ceramics 12	2.00
Ceramics 13	4.00
Ceramics 14	4.00
Ceramics 15	4.00
Ceramics 16	4.00
Chemistry 1	8.00
Chemistry 1a	6.00
Chemistry 1b	6.00
Chemistry 3	8.00
Chemistry 3 (½ sem.)	5.00
Chemistry 4	8.00
Chemistry 5a	10.00
Chemistry 5b	10.00
Chemistry 5c	10.00
Chemistry 5c (8 hrs.)	8.00
Chemistry 8	8.00
Chemistry 9a	10.00
Chemistry 9b	10.00
Chemistry 9c	10.00
Chemistry 10a	5.00
Chemistry 10b (½ sem.)	5.00
Chemistry 11a (per hr.)	2.00
Chemistry 11b (per hr.)	2.00
Chemistry 13a	10.00
Chemistry 13b	10.00
Chemistry 15	8.00
Chemistry 16	3.00
Chemistry 21	8.00
Chemistry 22	10.00
Chemistry 27	8.00
Chemistry 33	8.00
Chemistry 35	10.00
Chemistry 61	5.00
Chemistry 65	5.00
Chemistry 66	5.00
Chemistry 69	5.00
Chemistry 70	3.00
Chemistry 71	3.00
Chemistry 72	3.00

Chemistry 78	3.00
Chemistry 80	3.00
Chemistry 102c	5.00
Chemistry 103	10.00
Chemistry 103a	10.00
Chemistry 104	5.00
Chemistry 104a	5.00
Chemistry 105a (per hr.)	2.00
Chemistry 106	10.00
Chemistry 107 (per hr.)	2.00
Chemistry 108	3.00
Chemistry 110	10.00
Chemistry 111 (per hr.)	2.00
Civil Engineering 5l	1.50
Civil Engineering 13	1.50
Civil Engineering 14	1.50
Civil Engineering 14a	.50
Civil Engineering 27	1.00
Civil Engineering 28	1.00
Civil Engineering 31	1.00
Civil Engineering 32	1.00
Civil Engineering 33	1.00
Civil Engineering 34	1.00
Civil Engineering 51	1.50
Civil Engineering 53	1.50
Civil Engineering 62	1.50
Dairy Husbandry 11	4.00
Electrical Engineering 16	3.00
Electrical Engineering 22	4.00
Electrical Engineering 23	5.00
Electrical Engineering 24	5.00
Electrical Engineering 27	5.00
Electrical Engineering 28	3.00
Electrical Engineering 29	4.00
Electrical Engineering 61	3.00
Electrical Engineering 62	4.00
Electrical Engineering 64	3.00
Entomology 1a	1.00
Entomology 1b	1.00
Entomology 2	1.50
Entomology 3	1.50
Entomology 4a	1.50
Entomology 4b	1.50
Entomology 5	1.50
Entomology 6a	2.00
Entomology 6b	2.00
Entomology 7	1.50
Entomology 8a	1.50
Entomology 8b	1.50
Entomology 9	1.50
Entomology 10	1.00
Entomology 11	1.50
Entomology 13	1.50
Entomology 14	1.50
Entomology 102	1.50
Entomology 103	1.50
Entomology 108	1.50
Entomology 109	1.50
General Engineering Drawing 2	1.00
General Engineering Drawing 12	1.00
Geology 1	1.00
Geology 1a	1.00
Geology 2	1.00
Geology 3	2.25
Geology 4	3.00
Geology 5	2.75
Geology 5a	2.75
Geology 6	1.00
Geology 7	1.00
Geology 8	1.00
Geology 9	1.00
Geology 10	1.50
Geology 11	1.00
Geology 12	2.25
Geology 13a	2.00
Geology 13b	2.25
Geology 14	1.00
Geology 15	1.00
Geology 16	1.00
Geology 17	1.00
Geology 18	1.00
Geology 23	1.00
Geology 24	1.00
Geology 25	1.00
Household Science 1	3.00
Household Science 4	5.00
Household Science 5a	2.00
Household Science 5b	2.00
Household Science 6	3.00
Household Science 10	2.00
Household Science 14a	5.00
Household Science 14b	5.00
Household Science 17	2.00
Household Science 18a	5.00
Household Science 18b	5.00
Mechanical Engineering 13	3.00
Mechanical Engineering 61	3.00
Mechanical Engineering 64	3.00
Mechanical Engineering 65	3.00
Mechanical Engineering 66	3.00
Mechanical Engineering 67	1.50
Mining Engineering 9	2.00
Mining Engineering 62	1.00
Mining Engineering 64	3.00
Municipal and Sanitary Engineering 2	1.00
Municipal and Sanitary Engineering 6a	1.00
Physics 3a	2.00
Physics 3b	2.00
Physics 4a	2.00
Physics 4b	2.00
Physics 8a	2.00
Physics 8b	2.00
Physics 10a	2.00
Physics 10b	2.00
Physics 15	2.00
Physics 16	2.00
Physics 18	2.00
Physics 22	2.00
Physics 25	2.00
Physics 31a	2.00
Physics 31b	2.00
Physics 32	2.00
Physiology 1	3.50
Physiology 2	3.50
Physiology 3	3.50
Physiology 4a	3.50
Physiology 4b	3.50
Physiology 5a	3.50
Physiology 5b	3.50
Physiology 103	3.50
Psychology 3	2.00
Psychology 4	2.00
Railway Engineering 11	2.00
Railway Engineering 63	3.00
Theoretical and Applied Mechanics 5	2.00
Theoretical and Applied Mechanics 10	1.00
Theoretical and Applied Mechanics 15	2.00
Theoretical and Applied Mechanics 16	2.00
Theoretical and Applied Mechanics 25	2.00
Theoretical and Applied Mechanics 26	1.00
Theoretical and Applied Mechanics 29	2.00
Zoology 1	2.50
Zoology 2	3.50
Zoology 3	3.00
Zoology 4	2.50
Zoology 6	3.00
Zoology 7	1.00
Zoology 9	2.00
Zoology 11	3.00
Zoology 14a (per hr.)	1.00
Zoology 14b (per hr.)	1.00
Zoology 15a (per hr.)	1.00
Zoology 15b (pet hr.)	1.00
Zoology 17	1.00
Zoology 18	1.00
Zoology 22	3.00
Zoology 23	2.00

AVERAGE ANNUAL EXPENSES

The following are estimated average annual expenses for undergraduate students attending at Urbana, *exclusive* of books, clothing, railroad fare, laboratory fees, if any, and small miscellaneous needs:

*Semester fees	$ 24.00 to	$ 24.00
Room rent for each student (two in room)	72.00 to	80.00
Table board in boarding houses and clubs	162.00 to	200.00
Washing	20.00 to	30.00
Total	$272.00 to	$334.00
Board and room in private house, a week	$ 5.50 to	$ 6.50

In addition to the foregoing, freshmen pay a matriculation fee of $10.00, and the men are required to buy a cadet uniform, which costs $16.20. Freshmen engineering students will need to buy a set of drawing instruments at a cost of about $18.00.

Other necessary expenses will need to be taken into consideration. For all the necessary expenses of the year the average student is likely to need not less than $375.00 to $500.00. Most students spend more than this amount.

For information in regard to scholarships which cover the matriculation and incidental fees, see page 113.

Board and Rooms

The University does not provide dormitories nor furnish board, but the numerous rooming and boarding houses near the campus are to a certain extent under the supervision of the University. The Young Men's and Young Women's Christian Associations of the University will aid new students in securing rooms and board.

Prospective women students and their parents are invited to correspond with the Dean of Women in regard to suitable places.

*Students of law and music, special students, and conditioned students must make needed changes in the amount given for "semester fees."

PART II
THE COLLEGES AND SCHOOLS

THE COLLEGE OF LIBERAL ARTS AND SCIENCES

For a description of the *buildings* used by this College, see page 50, for *museums and collections* belonging to it (art, archeology, commerce, education, European culture, botany, entomology, geology, and zoology), see pages 58, 59; for a summary of its *courses,* see pages 66-67; for *clubs and societies* auxiliary to its courses of study, see page 112; for *fees,* see page 118.

ORGANIZATION

The organization of the College of Liberal Arts and Sciences, in which are merged the former College of Literature and Arts and College of Science, became fully effective on July 1, 1913, following upon an action of the Board of Trustees, taken on July 5, 1912. During the period of transition from the old order of two Colleges, to the new single College, various temporary adjustments will be necessary; procedure according to the regulations of the former Colleges, especially in matters like requirements for admission, elective subjects, honors, and combined courses, must continue for certain groups of students already registered. Beginning in September, 1916, a new schedule of requirements for admission to the College of Liberal Arts and Sciences will go into full operation. Changes in the requirements for graduation with the degree of Bachelor of Arts have been worked out by the Faculty and approved by the Board of Trustees. These are described as the "New Requirements" and are effective for classes entering in 1913 and later. Students in other classes may proceed under the old or the new requirements. The requirements of the former Colleges are printed in separate paragraphs wherever necessary.

PURPOSE

The purpose of the College of Liberal Arts and Sciences is, first, to secure to its students a liberal education including both the humanities and the sciences; second, to furnish specially arranged courses preparatory to later professional and technical studies by which good students may ordinarily obtain in six years both the degree in arts and a professional degree in law or medicine, or a technical degree in engineering; and, third, to provide certain highly specialized courses in applied science (particularly chemistry), business administration, journalism, and household science. The degree of Bachelor of Arts is conferred upon the completion of all these courses, except those in applied science for which the degree of Bachelor of Science is given.

Under the modified elective system a student who desires to prepare for teaching may specialize to a considerable extent in the subject which he wishes to teach and may also find time for courses in education and related subjects of interest to teachers. Such students should, as a rule, continue their preparation in the Graduate School.

Students who desire to devote a considerable part of their undergraduate course to specific preparation for some calling other than teaching may select

courses in (1) business administration, including general business, secretarial service, banking, insurance, accounting, and railway administration and transportation; or (2) journalism; or (3) applied chemistry; or (4) ceramics*; or (5) household administration.

ADMISSION

See the statement of the entrance requirements of the University, pages 69-91.

SPECIAL STUDENTS

For a statement of the regulations of the University in regard to special students, see page 75.

It is the policy of this College to admit as special students only a select group of mature and serious persons who, though unable to meet the formal requirements for entrance, are substantially prepared for work of college grade.

GENERAL REQUIREMENTS FOR GRADUATION

Since the merger of the College of Literature and Arts and the College of Science in July, 1913, the faculty of the new College of Liberal Arts and Sciences has adopted a unified curriculum leading to the degree of bachelor of arts. The present juniors and seniors, however, will as a rule conform their courses to the old requirements, while the sophomores and freshmen must follow the new requirements. These are printed separately for convenience of reference.

I. Old Requirements

The following general requirements apply to all candidates for the degree of bachelor of arts who were admitted before 1913.

A. *University Requirements.*—Each candidate must meet the general University requirements as to residence and registration. He must also secure credit in approved courses (see pages 126-129 below) amounting to 130 hours. An hour is one class period a week for one semester, each class period presupposing two hours' preparation by the student, or the equivalent in laboratory or drawing room.

B. *Prescribed Studies.*—Subjects specifically prescribed for all students: *Rhetoric 1-2*† (6 hours); *Physical Training, 1-2 and 1a for men, 7a-7b and 9 for women; Military Science 1 and 2 for men.* In addition, students who purpose to make a science their major subject, are required to have *Chemistry 1*, and *Physics 2a, 2b (or 1, 3)* unless they have had one-year courses in these subjects in an accredited high school or acceptable equivalent courses elsewhere.

C. (1) *Group Requirements for the degree according to the schedule of the former College of Literature and Arts.*—Every candidate must offer a minimum of 8 hours in each of the following groups:

I. English, including literature and rhetoric.

II. Ancient and modern languages other than English, including Greek, Latin, the Germanic languages, and the Romance languages. Only courses which require the use of a foreign language may be counted in this group, and the 8 hours offered must be in one language.

III. The social sciences, including history, economics, political science, and sociology.

*The courses in ceramics will be transferred to the College of Engineering on July 1, 1915.

†Those students who show by examination a proficiency in composition sufficient to qualify them for Rhetoric 2 may be excused from Rhetoric 1. See page 75.

IV. Mathematics and philosophy, including mathematics, education, philosophy, and psychology. A candidate who elects mathematics must take at least five hours. If a student does not elect mathematics, his elections in this group must include work in at least two of the other departments of the group. That is, if he does not take mathematics, he must take either philosophy and psychology, or philosophy and education, or education and psychology. With the exception of mathematics, no subject of this group is open to freshmen.

V. The natural sciences, including astronomy, botany, chemistry, entomology, geology, physiology, physics, and zoology. Zoology 16 may not be counted toward this group requirement.

C. (2) *Group Requirements for the degree according to the schedule of the former College of Science.*—Each candidate must offer 8 hours in each of the following groups: 1, 2, 3, and 5. In group 4, 16 hours must be offered, provided that students who have had three years of work in foreign language in an accredited high school, or an equivalent course elsewhere, will be relieved from the requirement of Group 4, and similarly, those who have had one year or two years of foreign language may be relieved from 4 hours or 8 hours respectively of this requirement. The physics and chemistry of the prescribed list may be applied on the requirements of groups 1 and 2.

Group 1.—Mathematics, physics, astronomy, logic (Philosophy 1), mineralogy (Geology 5).

Group 2.—Chemistry, geology, household science, bacteriology.

Group 3.—Botany, zoology, physiology, psychology, entomology.

Group 4.—Foreign language.

Group 5.—English literature, history, political science, economics, philosophy, education.

D. (1) *Major Subjects according to the former College of Literature and Arts.*—Each candidate must select some one subject to be designated as his major, and secure credit in that subject to the amount of 24 hours. The courses selected for the last two years should include some distinctly advanced work. The subjects which may be recognized as majors are subject to additions; at present they are as follows: Classics[1]; economics; education; English[2] (including English literature and rhetoric); French[3]; German[4]; Greek[1]; history; household science; Latin[1]; mathematics; philosophy; political science; psychology; sociology.

Special requirements and suggestions for students in business courses and in household science are indicated below, on pages 133 and 142 respectively. Students holding scholarships in household science must make that subject their major, and take one of the courses outlined on pages 142 and 143 below.

D. (2) *Major Subjects according to the former College of Science.*—A total credit of at least 20 hours must be secured in some one of the divisions of the following major elective list. Not more than 40 hours' work (exclusive of thesis) in any one of these divisions may be applied toward graduation. In arranging the subjects to be counted toward the major requirement the student is advised to consult with the head of the department in which the major is taken.

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[1]For the definition of the major in this subject, see below, page 304.
[2]For the definition of the major in English, see below, page 329.
[3]A major in French must include 24 hours in addition to French 1a-1b.
[4]A major in German must include 24 hours in addition to German 1 and 3.

Major electives are: Astronomy, botany, chemistry, education, entomology, geology (including mineralogy and physical geography), household science, library science, mathematics, physics, physiology, psychology, and zoology.

E. *Elective Subjects.*—The remainder of the course is made up of electives chosen under defined conditions.

1. Credit is regularly given for courses properly announced in the following subjects: Art and design (the total credit in this department is limited to 20 hours), astronomy, botany, chemistry, the classics, economics (including accountancy and commercial law), education, English, entomology, geology, Germanic languages, history, household science, library science, mathematics, philosophy, physics, physiology, political science, psychology, Romance languages, sociology, zoology.

2. Not more than 40 hours in any one subject may be counted for graduation, except when the student is writing a thesis. In this case he may count, in addition to the 40 hours, the hours of the seminar course in which he does his thesis work. In the department of English a student may take 40 hours in addition to Rhetoric 1 and 2.

3. No credit is granted in any subject unless the student pursues it for the full time required in the shortest course offered in that subject. For example, if the student elects a course which yields two hours of credit for one semester, he must stay in the class during the semester in order to get any credit at all. In order to secure any credit in a beginning course in a foreign language, a full year's work must be completed.

4. Seniors graduating under the schedule of the former College of Literature and Arts who register in courses open to freshmen may receive only one-half of the credit regularly assigned to such courses. For the year 1914-1915 the following courses are included in this list: Art and Design 1 and 2; Astronomy 1; Botany 1, 4d; Chemistry 1; English 1-2, 10-11, 20; Entomology 1a-1b; French 1a-1b; Geology 3, 10, 14, 23; German 1, 3; Greek 1a-1b; History 1a-1b, 2a-2b; Household Science 2, 7a-7b; Latin 1a-1b; Library Science 12; Mathematics 2, 4; Rhetoric 1-2; Spanish 1a-1b; Zoology 1, 16.

5. A limited amount of credit toward the degree of bachelor of arts is ordinarily given for courses offered in other colleges and schools of this University. Students who continue under the schedule of the former College of Science may select, with the approval of the Dean, approximately one-third of the work to be counted toward a degree, from subjects given in other colleges of the University. Students who continue under the schedule of the former College of Literature and Arts will ordinarily confine their elections of work in other colleges and schools to the following courses:

Physical Training.—Not to exceed 5 semester hours.

Military Science and Tactics.—Military Science 1 and 2.

Law.—Law 1a-1b (Contracts); Law 2a-2b (Torts); Law 3 (Real Property); Law 4 (Pleading); Law 5 (Criminal Law); Law 6 (Personal Property). The total credit is limited to 24 hours. None of these courses may be taken before the senior year. Law 1a-1b may count for six hours only.

Engineering.—General Engineering Drawing 1 and 2 (Mechanical Drawing and Descriptive Geometry); Theoretical and Applied Mechanics 20 and 21 (Analytical Mechanics); Mechanical Engineering 12 or 11 (Thermodynamics); Civil Engineering 96 or 27 (Surveying); Architecture 31, 32 (Architectural

Drawing); Architecture 13, 14, 15, 16 (History of Architecture); Electrical Engineering 4 and 21, or 2 and 26 (Principles).

Agriculture.—Agricultural Extension (Elementary Agriculture for teachers); Agronomy 25 (Seeds), for business students only; Agronomy 9 (Soil Physics); Agronomy 22 (Plant Breeding); Animal Husbandry 7 (Principles of Animal Nutrition); Animal Husbandry 30 (Genetics); Farm Management 1; Horticulture 9 (Forestry); Horticulture 10a (Landscape Gardening); Horticulture 12 (Evolution of Horticultural Plants); Horticulture 19 (Amateur Floriculture), for household science students only. The total credit allowed in these agricultural courses will not ordinarily exceed 14 hours.

Library Science.—Library 3a-3b (Selection of Books); 7 (History of Libraries); 9 (History of Books and Printing); 2a-2b or 12 (General Reference); 13a-13b (Public Documents). The total credit allowed in Library Science will not ordinarily exceed 14 hours. The course in General Reference (Library 12) is of special value to underclassmen in the courses in Literature and Arts.

Music.—1-2, 3-4, 5-6, 7-8, 9-10, and 12-13 (courses in the history and theory of music).

Courses not listed under paragraphs 1 to 5 above may not be counted for the degree of bachelor of arts, except by special permission of the Dean of the College.

F. *Bachelors' Theses.*—A bachelor's thesis is not generally required in this College. Students of high standing are, however, encouraged to write theses in connection with their major studies. Credit toward the degree is given for thesis work only as a part of the work in some course for which the student is registered. Students desiring to take a thesis course in geology or mineralogy may add to their credits in those subjects the credits received for chemistry; and students in physiology may add to their credits in that subject those in zoology and bacteriology. Only students graduating with a thesis will, as a rule, be selected for fellowships, scholarships, and other similar university honors. Candidates for honors or the honor degree are required by the general regulations of the University to write a thesis. See below, page 149.

II. New Requirements

Students who were admitted in 1913 and later will conform to the following requirements for the degree of bachelor of arts:

A. *University Requirements.*—Each candidate must meet the general university requirements with respect to registration and residence. He must also secure credit in approved courses amounting to one hundred thirty hours, an hour being one class period a week for one semester. Each class period presupposes two hours preparation by the student, or the equivalent in the laboratory or drawing room.

B. *Prescribed Subjects.*—Rhetoric 1-2; Physical Training 1-2 and 1a for men; Physical Training 7a-7b and 9 for women; Military Science 1 and 2 for men.

C. *Group Requirements.*—Every candidate must offer the minimum of work specified in each of the following groups:

I. *English.*—The offering in this group must include at least a one-semester course in literature.

II. *Foreign Languages and Literatures* (exclusive of courses in translation).

If a student has offered but two units of a foreign language for entrance to the University, he must pursue the study of foreign language through two year-courses or the equivalent. If he has offered for entrance three or more units of foreign language, he must continue the study of foreign language through one year of his college course.

Note: Candidates for the degree who have not offered Greek or Latin or French or German for entrance must offer one of these languages for graduation.

III. *History, Political and Social Science.*—History, economics, political science, sociology: 8 hours.

IV. *Mathematics and Physical Science.*—Mathematics, astronomy (courses with college mathematics as prerequisites), physics, chemistry: 8 hours.

V. Botany, entomology, geology, physiology, zoology: 8 hours.

VI. Education, philosophy, psychology: 6 hours, of which 3 shall be in philosophy or psychology.

D. *Major Subjects.*—Each candidate must select some subject as his major. A major consists of courses amounting to 20 hours chosen from among those designated by a department and approved by the faculty of the college. Such courses are to be exclusive of those elementary or beginning courses which are open to freshmen, and inclusive of some distinctly advanced work.

The subjects at present recognized as majors in this college are: Astronomy, bacteriology, botany, chemistry, classics, education, economics, English, entomology, French, geology, German, Germanic languages, Greek, history, household science, Latin, mathematics, philosophy, physiology, physics, political science, psychology, Romance languages, sociology, zoology.

E. *Minor Subjects.*—Each candidate must offer, in addition to his major, a minor of 20 hours in one or more allied subjects designated by the major department and approved by the faculty of the college. At least 8 hours must be offered in one subject.

F. *Elective Subjects.*—

1. Not more than 40 hours in any one subject may be counted for graduation, except: (a) in special courses approved by the faculty of the college; (b) when a student is writing a thesis, he may count, in addition to the 40 hours, the hours of the course in which he does his thesis work; (c) in the department of English a student may take 40 hours in addition to Rhetoric 1-2.

   Note: The total credit in Art and Design is limited to 20 hours.

2. No credit is granted in any subject unless the student pursues it for the full time required in the shortest course offered in that subject. For example, if the student elects a course which yields two hours for one semester, he must stay in the class during one semester in order to get any credit at all. In order to secure any credit in a beginning course in a foreign language, a full year's work must be completed.

3. A limited amount of credit towards the degree of bachelor of arts is ordinarily given for courses offered in other colleges and schools of this University, as follows:

Physical Training: Not to exceed 5 semester hours.

Military Science and Tactics: Military Science 1 and 2.

Law: See page 141.

Engineering: General Engineering Drawing 1 and 2 (Mechanical Drawing and Descriptive Geometry); Theoretical and Applied Mechanics 20 and 21 (Analytical Mechanics); Mechanical Engineering 12 and 11 (Thermodynamics); Civil Engineering 96 or 27 (Surveying); Architecture 31, 32 (Architectural Drawing); Architecture 13, 14, 15, 16 (History of Architecture); Electrical Engineering 4 and 64, or 61, 12, 62. The total credit allowed in these engineering courses will not ordinarily exceed 24 hours.

Agriculture: Agricultural Extension 1 (Elementary Agriculture for Teachers); Agronomy 12, Agronomy 25 (Seeds), for business students only; Agronomy 9 (Soil Physics); Farm Management 1; Agronomy 22 (Plant Breeding); Animal Husbandry 7 (Principles of Animal Nutrition); Animal Husbandry 30 (Genetics); Horticulture 9 (Forestry); Horticulture 10a (Landscape Gardening); Horticulture 12 (Evolution of Horticultural Plants); Horticulture 19 (Amateur Floriculture), for household science students only. The total credit allowed in these agricultural courses will not ordinarily exceed 14 hours.

Library Science: Library 7 (History of Libraries); 9 (History of Books and Printing); 2a-2b or 12 (General Reference); 13a-13b (Public Documents). The course in General Reference (Library 12) is of special value to students in the College of Liberal Arts and Sciences.

Music: Music 1-2, 3-4, 5-6, 7-8, 9-10, and 12-13 (courses in the history and theory of music).

Courses not listed under paragraphs 1 to 5 above may not be counted for the degree of Bachelor of Arts, except by special permission of the Dean of the College.

G. *Bachelors' Theses:* A bachelor's thesis is not generally required in this College. Students of high standing are, however, encouraged to write theses in connection with their major studies. Credit toward the degree is given for thesis work only as a part of the work in some course for which the student is registered. The presentation of a thesis is specifically required of all candidates for the honor degree.

Requirements for the Degree of Bachelor of Science

Pending further action by the College of Liberal Arts and Sciences and by the Senate, students admitted to work leading to the degree of Bachelor of Science in the General Science Course [see under "The Old Requirements," especially paragraphs C(2) and D(2)], who have completed that course including a major in Groups 4 or 5, together with two year-courses or their equivalent in foreign language, will be graduated with the degree of Bachelor of Science.

ARRANGEMENT OF COURSES

First Year

Subjects Prescribed for Freshmen

The following subjects must be taken during the freshman year: *Rhetoric* 1-2*, three hours each semester; *Military* 2, one hour each semester, and *Military*

*See footnote, page 126.

1, one hour second semester (for men); *Physical Training* (Physical Training 1-2 and 1a for men; 7a-7b and 9 for women). Students who have entered according to the requirements formerly set down for the College of Literature and Arts, must take *foreign language,* 4 hours each semester; students entering as of the former College of Science, should take *Chemistry* 1, unless chemistry has been accepted for admission.

Freshman Electives

The following subjects are open to freshmen. The total amount taken in any semester is limited to eighteen hours, and should not be less than fifteen. All freshmen in the courses in Business Administration must take 6 hours from Economics 7, 22, 26, 27.

First Semester

I. English 10[1] (3)[2]; Rhetoric 1 (3).
II. French 1a (4) or 2a (4); German 1 (4) or 3 (4) or 4 (4) or 5 (4); Greek 1a (4) or 7 (3); Latin 1a (4) or 2a (4); Spanish 1a (4) or 2a (3) or 3a (2).
III. Mathematics 2 (3) and 4 (2).
IV. Economics 7 (3) and 26 (3); History 1a (4) or 2a (3).
V. Astronomy 1 (3); Botany 1[3] (5), 4d (3); Chemistry 1[4] (5) or 1a[4] (4); Entomology 1a (2); Geology 1 (5), 3[4] (5), 14 (3), 23[4] (5); Physics 7a[5] and 8a[5] (5); Physiology 4a (5); Zoology 1[4] (5).

Household Science 2 (2) or 7a (2).
Library Science 12 (2).
Art and Design 1 (3).

Second Semester

I. English 11[1] (3)[2]; Rhetoric 2 (3).
II. French 1b (4) or 2b (4); German 3 (4) or 4 (4) or 5 (4) or 6 (4) or 7 (4); Greek 1b (4), 4 (4), or 6 (3); Latin 1b (4), or 2b (4); Spanish 1b (4) or 2b (3) or 3b (2).
III. Mathematics 6 (5).
IV. Economics 22 (3) and 27 (3); History 1b (4) or 2b (3).
V. Astronomy 4 (5); Botany 1[3] (5), 2b (5), 3b (5), 4a (5), 4b (5), 4c (5); Chemistry 1[4] (5) or 1a[4] (4) or 2 and 3 (5); Entomology 1b (2); Geology 1a (5), 3[4] (5), 8 (3), 10 (3), 12 (5); Physics 7b[5] and 8b[5] (5); Zoology 2 (5), 1[4] (5), or 16 (2).

Household Science 1 (3).
Art and Design 1 (2).

Second Year

Male students must continue Military 2 throughout the year. Students who have failed to secure credit for any of the prescribed subjects of the freshman year must make up such deficiencies at this time.

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[1]English 10-11 is open only to freshmen who have presented the minimum amount of English required for admission. See the description of this course, page 329.

[2]The figure immediately following the subject is the number of the course (see page 263); the figures in parenthesis indicates the number of credit hours to be secured in the course each semester.

[3]Either semester.

[4]May be taken in either semester, but not in both.

[5]Prerequisite: Mathematics 4 (Trigonometry) which may be taken at the same time.

Election

Aside from the subjects prescribed for the first two years, each student selects, with the advice of the Dean or other college advisers, such courses as will enable him to meet the requirements for graduation as stated above.

COURSES IN BUSINESS ADMINISTRATION

Courses in economics, accountancy, banking, commerce, railway administration, and industry are offered in combination with courses in language, law, and science with the aim of providing a university training for business life. The combined courses are designed to give the student a knowledge of the principles underlying all lines of business with special training in some profession.

Requirements for Graduation

For the present the requirements for graduation for students in the Courses in Business Administration will remain as they have been in the past. In order to graduate from the University in these courses the student must secure credit for 130 hours of study, including the prescribed courses: Rhetoric 1-2; Physical Training 1-2 and 1a for men, 7a-7b and 9 for women; Military Science 1 and 2 for men. Every student must secure at least eight hours in each of the following *groups* of subjects:

I. English language and literature, including rhetoric.

II. Latin, Greek, French, German, Italian, Spanish.
Only courses which require the use of a foreign language may be counted in this group, and the 8 hours must be in the same language.

III. History, economics, sociology, and political science.

IV. Mathematics, education, philosophy, and psychology.
A candidate who elects mathematics must take at least five hours of it. If a student does not elect mathematics, his elections in this group must include work in at least two of the other departments of the group.

V. Astronomy, botany, chemistry, entomology, geology, physiology, physics, and zoology.

Students in Business Administration must also take:

(1) Six hours for the following subjects in the freshman year: Economic Resources (Econ. 26), Modern Industries (Econ. 27), Economic History of England (Econ. 7), Economic History of the United States (Econ. 22).

In the case of students transferring from other colleges or institutions with advanced standing in the Business Courses this requirement may be modified to suit individual needs.

(2) Principles of Economics (Econ. 1).

(3) Business Writing (Rhet. 10). Senior Conference on Written Work (Rhet. 25-26).

(4) Principles of Accounting (Acc'y 1a-1b).

(5) Commercial Law (Econ. 25a-25b).

Business students are required to make economics their major. For the present 24 hours will be required as in the past, but not more than 6 hours of freshman economics (Economics 7, 22, 26, and 27) may be counted towards the major.

ARRANGEMENT OF COURSES

The subjects of study are arranged in the courses outlined below to furnish training for (1) general business, (2) commercial and civic secretaries, (3) banking, (4) insurance, (5) accountancy, (6) railway traffic and accounting, (7) railway transportation, (8) commercial teachers.

The work of the class-room is supplemented by lectures by practical specialists, and by visits of inspection to industrial and mercantile establishments.

GENERAL BUSINESS COURSE

The general business course is intended for students who wish a general knowledge of modern business organization and methods and their relation to the public welfare, without specializing in the details of any particular business.

Every student must take 15 to 18 hours of work each semester. Students desiring mathematics, or taking courses requiring it, should elect it the first year, omitting Economic Resources (Economics 26), or Economic History of the United States (Economics 22), and science, which may then be elected the second year.

FIRST YEAR

FIRST SEMESTER	SECOND SEMESTER
Prescribed Subjects	*Prescribed Subjects*
Foreign language	Foreign language
Rhetoric (Rhet. 1)	Rhetoric (Rhet. 2)
Military	Military
Physical Training	Physical Training
Economic Resources (Econ. 26) or	Modern Industries (Econ. 27) or
English Econ. Hist. (Econ. 7)	Econ. Hist. of U. S. (Econ. 22)
Mathematics (Math. 2, 4) or	Mathematics (Math. 6) or
Science	Science

SECOND YEAR

Prescribed Subjects	*Prescribed Subjects*
Principles of Econ. (Econ. 1)	Money and Banking (Econ. 3)
Amer. Gov't (Pol. Sci. 1)	Business Organization (Econ. 6)
Military	Business Writing (Rhet. 10)
History of U. S. (Hist. 3a) or	Military
English History (Hist. 2a) or	State and Local Gov't (Pol. Sci. 3)
European History (Hist. 1a)	History of U. S. (Hist. 3b) or
	English History (Hist. 2b)
	European History (Hist. 1b)
Suggested Electives	*Suggested Electives*
Foreign language continued	Foreign language continued
Mathematics	Mathematics
Science	Science

THIRD YEAR

Prescribed Subjects	*Prescribed Subjects*
Elementary and Intermediate Accounting (Acc'y 1b)	Elementary and Intermediate Accounting (Acc'y 1b)
Domestic Com. (Econ. 28) or	Corporation Management (Econ. 10)
Foreign Com. (Econ. 29)	Organization of Foreign Com. (Econ. 31) or
	Tariff and Customs Regulations (Econ. 30)
Suggested Electives	*Suggested Electives*
History	History
Public Finance (Econ. 5)	Indust. Consol. (Econ. 11)
Foreign Language continued	Foreign language continued
Advanced Accounting and Auditing (Acc'y 2a)	Advanced Accounting and Auditing (Acc'y 2b)
Railway Transportation (Econ. 41)	Railway Rates (Econ. 42)
State Administration (Pol. Sci. 13)	Psychology (Psych. 2)
Psychology (Psych. 1)	Logic (Phil. 1)
Municipal Gov't (Pol. Sci. 4)	Summarizing and Abstracting (Rhet. 22)
Sales Correspondence (Rhet. 21)	

FOURTH YEAR

Prescribed Subjects

Seminar (Econ. 18a)
Conference on Written Work (Rhet. 25)
Labor Problems (Econ. 12)
Commercial Law (Econ. 25a)
Salesmanship (Econ. 37)

Suggested Electives

Political Ethics (Phil. 9)
Constitutional Law (Pol. Sci. 5)
Finan. Hist. of U. S. (Econ. 4a)
(See also third year electives)

Prescribed Subjects

Seminar (Econ. 18b)
Conference on Written Work (Rhet. 26)
Commercial Law (Econ. 25b)
Economic Development of Europe (Econ. 13)
Advertising (Econ. 38)

Suggested Electives

Economic Reform (Econ. 21)
Finan. Hist. of U. S. (Econ. 4b)
(See also third year electives)

COURSE FOR COMMERCIAL AND CIVIC SECRETARIES

This course is intended for students who expect to take service with chambers of commerce, commercial clubs, and civic organizations. The work of the first and second year is the same as in the general business course.

THIRD YEAR

FIRST SEMESTER

Prescribed Subjects

Elementary and Intermediate Accounting (Acc'y 1a)
Domestic Commerce (Econ. 28) or
Foreign Commerce (Econ. 29)
Municipal Gov't (Pol. Sci. 4)

Suggested Electives

Sales Correspondence (Rhet. 21)
Public Finance (Econ. 5)
Prin. of Sociol. (Sociol. 1)
State Administration (Pol. Sci. 13)
Political Ethics (Phil. 9)
Property Insurance (Econ. 34)

SECOND SEMESTER

Prescribed Subjects

Elementary and Intermediate Accounting (Acc'y 1b)
Organization of Foreign Commerce (Econ. 31) or
Tariff and Customs Regulations (Econ. 30)
Corporation Management (Econ. 10)
Charities (Sociol. 8)

Suggested Electives

Summarizing and Abstracting (Rhet. 22)
Indust. Consol. (Econ. 11)
Nat. Administration (Pol. Sci. 12)
Logic (Phil. 1)
Gov't of Illinois (Pol. Sci. 16)

FOURTH YEAR

Prescribed Subjects

Commercial Law (Econ. 25a)
Railway Transportation (Econ. 41)
Foreign Commerce (Econ. 29) or
Domestic Commerce (Econ. 28)
Conference on Written Work (Rhet. 25)
Salesmanship (Econ. 37)

Suggested Electives

Seminar (Econ. 18a)
Constitutional Law of U. S. (Pol. Sci. 5)
Labor Problems (Econ. 12)
Population (Sociol. 10)

Prescribed Subjects

Commercial Law (Econ. 25b)
Railway Rates (Econ. 42)
Tariff and Customs Regulations (Econ. 30) or
Organization of Foreign Commerce (Econ. 31)
Conference on Written Work (Rhet. 26)
Advertising (Econ. 38)

Suggested Electives

Seminar (Econ. 18b)
Social and Industrial Problems (Pol. Sci. 11)
Economic Reform (Econ. 21)
Criminology (Sociol. 9)

COURSE IN BANKING

The work of the first and second years in banking is the same as in the course in general business, but students must take advanced algebra (Math. 2), which is a prerequisite for the mathematics of investment (Math. 23).

THIRD YEAR

FIRST SEMESTER

Prescribed Subjects

Elementary and Intermediate Accounting (Acc'y 1a)
Public Finance (Econ. 5)

Suggested Electives

Domestic Com. (Econ. 28)
Logic (Phil. 1)
History

SECOND SEMESTER

Prescribed Subjects

Elementary and Intermediate Accounting (Acc'y 1b)
Math. of Investment (Math. 23)
Corporation Management (Econ. 10)
Economic Development of Europe (Econ. 13)

Suggested Electives

Tariff and Customs Regulations (Econ. 30)
Indust. Consol. (Econ. 11)
History

FOURTH YEAR

Prescribed Subjects

Practical Banking (Econ. 9)
Finan. Hist. of U. S. (Econ. 4a)
Foreign Com. (Econ. 29)
Commercial Law (Econ. 25a)
Seminar (Econ. 18a)
Conference on Written Work (Rhet. 25)

Suggested Electives

Labor Problems (Econ. 12)
Political Ethics (Phil. 9)
Advanced Accounting and Auditing (Acc'y 2a)

Prescribed Subjects

The Money Market (Econ. 8)
Finan. Hist. of U. S. (Econ. 4b)
Commercial Law (Econ. 25b)
Seminar (Econ. 18b)
Conference on Written Work (Rhet. 26)

Suggested Electives

Organization of Foreign Commerce (Econ. 31)
Advanced Accounting and Auditing (Acc'y 2b)

COURSE IN INSURANCE

The work of the first and second years in insurance is the same as in the course in railway traffic and accounting, except that Economics 7 (Econ. Hist. of England) may take the place of Economic Resources (Econ. 26), and that any other science may be taken instead of physics.

THIRD YEAR

FIRST SEMESTER

Prescribed Subjects

Elementary and Intermediate Accounting (Acc'y 1a)
Amer. Gov't (Pol. Sci. 1)

Suggested Electives

Foreign language continued
Hist. of U. S. (Hist. 8a)
European History (Hist. 1a)
Public Finance (Econ. 5)
Sales Correspondence (Rhet. 21)

SECOND SEMESTER

Prescribed Subjects

Elementary and Intermediate Accounting (Acc'y 1b)
Corporation Management (Econ. 10)
Mathematics of Investment (Math. 23)
State and Local Gov't (Pol. Sci. 3)

Suggested Electives

Foreign language continued
History of U. S. (Hist. 8b)
European History (Hist. 1b)
Summarizing and Abstracting (Rhet. 22)

FOURTH YEAR

Prescribed Subjects

Property Insurance (Econ. 34)
Commercial Law (Econ. 25a)
Sem. in Insur. (Econ. 18a)
Conference on Written Work (Rhet. 25)
Actuarial Theory (Math. 31)
State Administration (Pol. Sci. 18)

Suggested Electives

Finan. Hist. of U. S. (Econ. 4a)
Political Ethics (Phil. 9)
Labor Problems (Econ. 12)
Practical Banking (Econ. 9)
Salesmanship (Econ. 37)

Prescribed Subjects

Econ. of Insurance (Econ. 33)
Commercial Law (Econ. 25b)
Sem. in Insur. (Econ. 18b)
Conference on Written Work (Rhet. 26)

Suggested Electives

Finan. Hist. of U. S. (Econ. 4b)
Econ. Development of Europe (Econ. 13)
Indus. Consolid. (Econ. 11)
Money Market (Econ. 8)
Advertising (Econ. 38)

COURSES IN ACCOUNTANCY

The development of the commercial, industrial, and financial interests of the country has given rise to a demand for three classes of workers in accountancy: (1) the teacher, (2) the business executive, (3) the public accountant.

In order to give students adequate preparation for these three fields, the University offers several courses of study:

1. A four years' course in business administration with a maximum of work in accountancy, economics, history, political science, statistics, language, and other subjects.

2. Work in accountancy open to election by students in business administration as part of the general training necessary to a successful business executive.

3. A two years' special course in preparation for the examinations required by law for securing a certificate as a Certified Public Accountant.

According to this law, passed in 1903, establishing accountancy upon a professional basis, candidates are required to pass examinations in commercial law as affecting accountancy, the theory of accounts, practical accounting, and auditing.

Four-Year Course in Accountancy

FIRST YEAR

FIRST SEMESTER	SECOND SEMESTER
Prescribed Subjects	*Prescribed Subjects*
Foreign language	Foreign language
Rhetoric (Rhet. 1)	Rhetoric (Rhet. 2)
Military	Military
Physical Training	Physical Training
Algebra and Trig. (Math. 2, 4)	Analytical Geom. (Math. 6)
English Econ. Hist. (Econ. 7) or	Modern Industries (Econ. 27) or
Economic Resources (Econ. 26)	Econ. Hist. of U. S. (Econ. 22)

SECOND YEAR

Prescribed Subjects	*Prescribed Subjects*
Principles of Econ. (Econ. 1)	Money and Banking (Econ. 3)
Elementary and Intermediate Accounting (Acc'y 1a)	Business Organization (Econ. 6)
Science	Business Writing (Rhet. 10)
Military	Elementary and Intermediate Accounting (Acc'y 1b)
Suggested Electives	Science
Foreign language continued	Military
Calculus (Math. 7-9)	*Suggested Electives*
European History (Hist. 1a)	Foreign language continued
Hist. of U. S. (Hist. 3a)	European History (Hist. 1b)
Amer. Gov't (Pol. Sci. 1)	Hist. of U. S. (Hist. 3b)
	State and Local Gov't (Pol. Sci. 3)

THIRD YEAR

Prescribed Subjects	*Prescribed Subjects*
Advanced Accounting and Auditing (Acc'y 2a)	Advanced Accounting and Auditing (Acc'y 2b)
Public Finance (Econ. 5)	Corporation Management (Econ. 10)
Municipal Gov't (Pol. Sci. 4)	Mathematics of Investment (Math. 23)
Suggested Electives	*Suggested Electives*
Sales Correspondence (Rhet. 21)	Summarizing and Abstracting (Rhet. 22)
Foreign language	Foreign language
Domestic Commerce (Econ. 28)	Tariff and Customs Regulations (Econ. 30)
Logic (Phil. 1)	Railway Rates (Econ. 42)
Railway Transportation (Econ. 41)	

FOURTH YEAR

Prescribed Subjects	*Prescribed Subjects*
Accounting Problems and Auditing (Acc'y 3a)	Accounting Problems and Auditing (Acc'y 3a)
Commercial Law (Econ. 25a)	Commercial Law (Econ. 25b)
Seminar (Econ. 18a)	Seminar (Econ. 18b)
Conference on Written Work (Rhet. 25)	Conference on Written Work (Rhet. 26)
Political Ethics (Phil. 9)	
Suggested Electives	*Suggested Electives*
Practical Banking (Econ. 9)	Money Market (Econ. 8)
Finan. Hist. of U. S. (Econ. 4a)	Finan. Hist. of U. S. (Econ. 4b)
Labor Problems (Econ. 12)	

Two-Year Course in Accountancy

This course is open only to students in accountancy who are preparing for the C. P. A. examinations, who are at least 20 years of age and able to matriculate in the University, and who can furnish satisfactory evidence of at least one year's experience in the office of a practising public accountant. The course must be taken as outlined. No variation from it is allowed.

FIRST YEAR

FIRST SEMESTER	SECOND SEMESTER
Prescribed Subjects	*Prescribed Subjects*
Elementary and Intermediate Accounting (Acc'y 1a)	Elementary and Intermediate Accounting (Acc'y 1b)
Rhetoric (Rhet. 1)	Business Organization (Econ. 6)
Finan. Hist. of U. S. (Econ. 4a)	Rhetoric (Rhet. 2)
Algebra (Math. 2)	Money and Banking (Econ. 3)
Military	Mathematics of Investment (Math. 23)
Physical Training	Military
	Physical Training

SECOND YEAR

Prescribed Subjects	*Prescribed Subjects*
Advanced Accounting and Auditing (Acc'y 2a)	Advanced Accounting and Auditing (Acc'y 2b)
Accounting Problems and Auditing (Acc'y 3a)	Accounting Problems and Auditing (Acc'y 3b)
Commercial Law (Econ. 25a)	Business Writing (Rhet. 10)
Practical Banking (Econ. 9)	Corporation Management (Econ. 10)
Property Insurance (Econ. 34)	Commercial Law (Econ. 25b)
Military	Economics of Insurance (Econ. 33)
	State and Local Gov't (Pol. Sci. 3)
	Military

COURSES IN RAILWAY ADMINISTRATION

There are two courses offered under the head of railway administration, one emphasizing those subjects which are of most value to the student interested in the accounting and traffic aspects of railway work, the other laying stress upon the transportation service, properly so called, and intended to prepare men directly for the transportation departments of railways.

Course in Railway Traffic and Accounting

FIRST YEAR

FIRST SEMESTER	SECOND SEMESTER
Prescribed Subjects	*Prescribed Subjects*
Foreign language	Foreign language
Rhetoric (Rhet. 1)	Rhetoric (Rhet. 2)
Military	Military
Physical Training	Physical Training
Algebra and Trig. (Math. 2, 4)	Analytical Geometry (Math. 6)
Economic Resources (Econ. 26) or	Econ. Hist. of U. S. (Econ. 22) or
Eng. Econ. Hist. (Econ. 7)	Modern Industries (Econ. 27)

SECOND YEAR

Prescribed Subjects	*Prescribed Subjects*
Principles of Econ. (Econ. 1)	Money and Banking (Econ. 3)
Elementary and Intermediate Accounting (Acc'y 1a)	Business Organization (Econ. 6)
Amer. Gov't (Pol. Sci. 1)	Elementary and Intermediate Accounting (Acc'y 1b)
Physics (Phys. 1a and 3a)	Business Writing (Rhet. 10)
Military	Physics (Phys. 1b and 3b)
	Military

THIRD YEAR

Prescribed Subjects	*Prescribed Subjects*
Adv. Accounting and Audit. (Acc'y 2a)	Adv. Accounting and Audit. (Acc'y 2b)
Railway Transportation (Econ. 41)	Corporation Management (Econ. 10)
Railway Operation (Econ. 45a) or	Railway Rates (Econ. 42)
Traffic Administration (Econ. 43a)	Mathematics of Investment (Math. 23)
	Railway Operation (Econ. 45b) or
	Traffic Administration (Econ. 43b)

FOURTH YEAR

Prescribed Subjects	*Prescribed Subjects*
Accounting Problems and Auditing (Acc'y 3a)	Accounting Problems and Auditing (Acc'y 3b)
Traffic Admin. (Econ. 43a) or	Traffic Admin. (Econ. 43b) or
Railway Operation (Econ. 45a)	Railway Operation (Econ. 45b)
Sem. in R'y Admin. (Econ. 18a)	Sem. in R'y Admin. (Econ. 18b)
Conference on Written Work (Rhet. 25)	Conference on Written Work (Rhet. 26)
Commercial Law (Econ. 25a)	Commercial Law (Econ. 25b)

Course in Railway Transportation

In choosing additional courses to make up the required 130 hours of credit, six hours of such electives must be taken in history, political science, more advanced language, or philosophy.

FIRST YEAR

FIRST SEMESTER	SECOND SEMESTER
Prescribed Subjects	*Prescribed Subjects*
Foreign language	Foreign language
Rhetoric (Rhet. 1)	Rhetoric (Rhet. 2)
Military	Military
Physical Training	Physical Training
Gen. Engin. Drawing (G. E. D. 1)	*Descriptive Geom. (G. E. D. 12)
Algebra and Trig. (Math. 2, 4)	Anal. Geom. (Math. 6)

SECOND YEAR

Prescribed Subjects	*Prescribed Subjects*
Principles of Econ. (Econ. 1)	Money and Banking (Econ. 3)
Calculus (Math. 7)	Business Organization (Econ. 6)
Physics (Phys. 1a, 3a)	Physics (Phys. 1b, 3b)
Military	Military
	Anal. Mech. (T. and A. M. 20)

THIRD YEAR

Prescribed Subjects	*Prescribed Subjects*
Railway Transportation (Econ. 41)	Business Writing (Rhet. 10)
Traffic Admin. (Econ. 43a) or	Railway Rates (Econ. 42)
Railway Operation (Econ. 45a)	Traffic Administration (Econ. 43b) or
Anal. Mech. and Resist. of Materials (T. and A. M. 21, 29)	Railway Operation (Econ. 45b)
	Engines and Boilers (M. E. 1)
	Electrical Engin. (E. E. 11)
	Surveying (C. E. 96)

FOURTH YEAR

Prescribed Subjects	*Prescribed Subjects*
Railway Operation (Econ. 45a) or	Railway Operation (Econ. 45b) or
Traffic Admin. (Econ. 43a)	Traffic Admin. (Econ. 43b)
Sem. in Ry. Admin. (Econ. 18a)	Mech. Engin. Lab. (M. E. 61)
Conference on Written Work (Rhet. 25)	Sem. in Ry. Admin. (Econ. 18b)
Elementary and Intermediate Accounting (Acc'y 1a)	Conference on Written Work (Rhet. 26)
Labor Problems (Econ. 12)	Elementary and Intermediate Accounting (Acc'y 1b)
Locomotives (Ry. M. E. 1)	Ry. Tests (Ry. M. E. 11)
Engin. Materials (T. and A. M. 29)	Mech. Engin. Lab. (M. E. 61)

COURSE FOR COMMERCIAL TEACHERS

This course is intended for students who are planning to teach commercial subjects in secondary schools.

FIRST YEAR

FIRST SEMESTER	SECOND SEMESTER
Prescribed Subjects	*Prescribed Subjects*
Foreign language	Foreign language
Rhetoric (Rhet. 1)	Rhetoric (Rhet. 2)
Military	Military
Physical Training	Physical Training
English Economic History (Econ. 7) or	Econ. Hist. of U. S. (Econ. 22)
Economic Resources (Econ. 26)	Modern Industries (Econ. 27)
Mathematics (Math. 2, 4) or	Mathematics (Math. 6) or
Science	Science

*This subject is to be taken for three hours' credit only.

SECOND YEAR

Prescribed Subjects	*Prescribed Subjects*
Principles of Econ. (Econ. 1)	Money and Banking (Econ. 3)
Amer. Gov't (Pol. Sci. 1)	Business Organization (Econ. 6)
Psychology (Psychol. 1)	Business Writing (Rhet. 10)
Military	Psychology (Psychol. 2)
History of U. S. (Hist. 3a) or	Military
European History (Hist. 1a)	History of U. S. (Hist. 3b) or
	European History (Hist. 1b)
Suggested Electives	*Suggested Electives*
Foreign language continued.	Foreign language continued
Mathematics	Mathematics
Science	Science
English literature	English literature

THIRD YEAR

Prescribed Subjects	*Prescribed Subjects*
Elementary and Intermediate Accounting (Acc'y 1a)	Elementary and Intermediate Accounting (Acc'y 1b)
Prin. of Education (Educ. 1)	Corporation Management (Econ. 10)
Domestic Commerce (Econ. 28) or	Hist. of Education (Educ. 2)
Foreign Commerce (Econ. 29)	Organization of Foreign Commerce (Econ. 31) or
	Tariff and Customs Regulations (Econ. 30)
Suggested Electives	*Suggested Electives*
History	History
Foreign language continued	Foreign language continued
Logic (Phil. 1)	Intro. to Philosophy (Phil. 2)
Public Finance (Econ. 5)	Prin. of Second. Educ. (Educ. 6)
Municipal Gov't (Pol. Sci. 4)	Railway Rates (Econ. 42)
Railway Transportation (Econ. 41)	Summarizing and Abstracting (Rhet. 22)
Sales Correspondence (Rhet. 21)	

FOURTH YEAR

Prescribed Subjects	*Prescribed Subjects*
Seminar (Econ. 18a)	Seminar (Econ. 18b)
Conference on Written Work (Rhet. 25)	Conference on Written Work (Rhet. 26)
Labor Problems (Econ. 12)	Econ. Devel. of Europe (Econ. 13)
Commercial Law (Econ. 25a)	Commercial Law (Econ. 25b)
Observation and Technique of Teaching (Educ. 10)	Social Education (Educ. 16) or
	School Hygiene (Educ. 15)
Suggested Electives	*Suggested Electives*
Advanced Accounting and Auditing (Acc'y 2a)	Advanced Accounting and Auditing (Acc'y 2b)
Political Ethics (Phil. 9)	Social Reform (Econ. 21)
Finan. Hist. of U. S. (Econ. 4a)	Financial Hist. of U. S. (Econ. 4b)
Constitutional Law of U. S. (Pol. Sci. 5)	The Money Market (Econ. 8)
Practical Banking (Econ. 9)	(See also third year electives)
(See also third year electives)	

COURSE IN JOURNALISM

Students who are preparing to enter the advertising or managerial sides of journalistic work should elect economics as a major and enroll in one of the business courses. The work they will take will then be selected under the advice of the proper instructors, according to the needs of the individual student and within the requirements of the College for graduation.

Students who are preparing for journalistic work on the reportorial, literary, or editorial sides should take their major work in English, following the suggested course. With the consent of the adviser, other courses may, for purposes of specialization, be substituted for suggested courses. A program which satisfies the group and major requirements may, for instance, be so modified in the third and fourth years as to lay emphasis on any one of the social sciences.

Students in journalism with major in English are subject to the requirements of the General Course in Liberal Arts and Sciences.

Suggested Course in Journalism

(Major in English)

FIRST YEAR

Prescribed Subjects		*Prescribed Subjects*	
Rhetoric 1	3	Rhetoric 2	3
Physical training	1	Physical training	1
Military	1	Military	2
Suggested Electives		*Suggested Electives*	
Continental European History (Hist. 1a)	4	History 1b	4
Foreign language	4	Foreign language	4
English 10 or science	3 or 5	English 11 or science	3
General Reference (Library 12)	2		

SECOND YEAR

Prescribed Subjects		*Prescribed Subjects*	
Military	1	Military	1
Suggested Electives		*Suggested Electives*	
News Writing (Rhetoric 12)	2	News Writing (Rhetoric 13)	2
English 1 or science	3 or 4 or 5	Foreign language continued	4
History of U. S. (Hist. 3a)	3	History of U. S. (Hist. 3b)	3
Foreign language continued	4	English 2 or State & Local Govt. (Pol. Sci. 3) (4 or 3) or Money and Banking (Econ. 3)	3
Am. Natl. Gov't (Pol. Sci. 1) or Principles of Economics (Econ. 1)	5	Shakspere (English 23) or	3
Am. Literature (English 12)	2	Literature (English 13)	2

THIRD YEAR

Intermediate English	(3)	Intermediate English	(3)
Municipal Govt. (Pol. Sci. 4)	3	Science	5
Foreign language continued	3 or 4	State & Local Govt. (Pol. Sci. 3) or Political Parties (Pol. Sci. 14)	3 or 2
Logic (Philosophy 1)	3	Intro. to Philosophy (Phil. 2)	3
Rhetoric 15 or 6, or Psychology 1	3	Foreign language	3 or 4
Sociology 1	3	Rhetoric 16 or 17, or Psychology 1	3
		Sociology 3	3

FOURTH YEAR

Rhetoric 15 or English 27	3	Rhetoric 16 or English 28	3
Political Ethics (Phil. 9) or Const. Law (Pol. Sci. 5)	3	Contemporary Politics (Pol. Sci. 18 or 28)	2 or 3
History of U. S. (Hist. 21)	3	Social & Indust. Legis. (Pol. Sci. 11)	3
Public Finance, or Corporation Management and Finance, or Labor Problems (Econ. 5 or 10 or 12)	3	Industrial Consolidation, or Economic History of Europe or Socialism and Social Reform (Econ. 11 or 13 or 21)	3
Foreign language	3 or 4	Foreign language	3 or 4

COURSE PRELIMINARY TO LAW

It is recognized by the best authorities on legal education that professional studies in law should be preceded by a thorough course in the humanities and the sciences. As a foundation for the study and practise of law, the following subjects offered by this College are of special importance: English, with special reference to composition and public speaking; Latin and French; logic; constitutional and political history; political science; economics; sociology.

By the proper selection of his studies it is possible for a prospective law student to take both the degree in arts and the degree in law in six years. The following first year courses in the College of Law, not exceeding a total of 24 hours, may be counted for the degree of Bachelor of Arts: Law 1a-1b (contracts); Law 2a-2b (torts); Law 3 (real property); Law 4 (pleading); Law 5 (criminal law); Law 6 (personal property). Law 1a-1b may count for six hours only. *Students are not permitted to take this work in law until their senior year.* If the student is also a candidate for the degree of LL.B., or J.D., he should in his fourth year register in the College of Law, pay the usual fee of that College, and file a copy of his study-list with the adviser for seniors in this College. A

fee of five dollars is charged for every law subject taken by students who do not pay the regular law school fee.

Courses in law do not in themselves constitute a major in this College, but six hours of law are accepted as part of the requirements for majors in the following departments: economics, history, political science, and sociology.

When taken by students registered in the College of Law, credit to a total of six hours toward the degree of LL.B. is accepted for courses offered by the College of Liberal Arts and Sciences in jurisprudence, international law, administrative law, and the law of taxation.

The degree of Bachelor of Arts is conferred at the close of the fourth year of the combined course provided that all the requirements for the degree are met at that time.

Candidates for the degree of Doctor of Law (J.D.) must take four hours in history, economics, political science, or sociology, in the fourth year of their course.

Students admitted to this University from other institutions may count the above courses in law for the degree of A.B. only on condition of completing at least 30 hours' work in residence in subjects offered by the College of Liberal Arts and Sciences.

See also the course outlined by the College of Law, page 214.

HOUSEHOLD SCIENCE

The courses of instruction given in this department are planned to meet the needs of four classes of students: (a) those who desire a knowledge of the general principles and facts of household science; (b) those who wish to make a specialty of household science for the purpose of teaching the subject in secondary schools and colleges; (c) those who wish some knowledge of the principles underlying household administration and institutional management; (d) those who are interested in the work of dietitians.

The suggested courses for teachers and for institutional workers are outlined below. The electives of the junior and senior years of the course in administration make possible a choice between lunch room management and institutional management, while the first three years of the course as outlined for teachers give a scientific basis for the work of the dietitian.

Students who hold scholarships in household science must make this subject their major along one of the lines indicated above and take each semester at least four hours in household science or in subjects required for admission to courses in household science.

Students who major in household science must also satisfy the requirements of the General Course in the College of Liberal Arts and Sciences in so far as these are not covered in the courses given below.

Suggested Course for Teachers of Household Science

FIRST YEAR

FIRST SEMESTER	SECOND SEMESTER
Inorganic Chemistry (Chem. 1)	*Principles of the Selection and Preparation of Food (Household Sci. 1)
Home Architecture & Sanitation (Household Science 2)	Inorganic Chemistry (Chem. 2)
Introductory Zoology (Zool. 1)	Qualitative Analysis (Chem. 3)
Rhetoric & Themes (Rhet. 1)	Rhetoric & Themes (Rhet. 2)
Physical Training 7a	Free Hand Drawing (Art & Design 1)
Hygiene (Physical Train. 9)	Physical Training 7b
	Textiles (Household Sci. 7b)

*Attention is called to the fact that high-school physics is a prerequisite for Household Science 1.

SECOND YEAR

Agricultural Analysis (Chem. 13a)
Economic Uses of Food (Household Science 6)
Survey of English Literature (Eng. 1)
Applied Design (Art & Design 12)
Organic Chemistry (Chem. 9)
Organic Synthesis (Chem. 9c)
Household Art and Clothing (Household Science 12)
Survey of English Literature (Eng. 2)
Plane Trigonometry (Math. 4)

THIRD YEAR

Minor Course in Physiol. (Physiol. 4a)
General Physics (Physics 7a)
Physics Laboratory (Phys. 8a)
Principles of Economics (Econ. 2)
Foreign language
Electives
Elementary Home Decoration (Household Science 3)
Dietetics (Household Science 5b)
Bacteriology (Bacteriology 5)
Foreign language
Electives

FOURTH YEAR

Food and Nutrition (Household Science 4)
Principles of Education (Edu. 1)
History of Home Economics (Household Science 13)
Electives
Teachers' Course (Household Sci. 11)
Principles of Secondary Education or Observation and Technique of Teaching (Education 6 or 10)
Home Management (Household Science 10)
Electives

The following subjects are suggested as electives for the junior and senior years: Psychology 1, 2; Botany 1; foreign language.

Suggested Course in Household Administration

FIRST YEAR

FIRST SEMESTER

Rhetoric and Themes (Rhet. 1)
Foreign language
Free Hand Drawing (Art & Design 1)
Home Architecture & Sanitation (Household Science 2)
Hygiene (Physical Training 9)
Physical Training 7a

Electives

Economic Resources (Econ. 26)
General Reference (Lib. Sci. 12)

SECOND SEMESTER

Rhetoric and Themes (Rhet. 2)
Foreign language
Art & Design 12
Textiles (Household Science 7b)
Physical Training 7b
General Zoology (Zoology 1)

SECOND YEAR

Inorganic Chemistry (Chem. 1)
Principles of Economics (Econ. 1)
Foreign language or Eng. 1

Suggested Electives

Continental European History (Hist. 1a)
History of the United States (Hist. 3a)
History of the Fine Arts (Art & Design 19)
English

*Principles of the Selection and Preparation of Food (Household Science 1)
Inorganic Chemistry (Chem. 2)
Qualitative Analysis (Chem. 3)
Foreign language (if not completed)

Suggested Electives

Continental European History (Hist. 1b)
History of the United States (Hist. 3b)
English
History of the Fine Arts (Art & Design 20)
Economic History of the United States (Economics 22)

THIRD YEAR

General Physiology (Physiol. 4a)
Economic Use of Food (Household Science 6)
Introduction to Psychology (Psychol. 1)

Suggested Electives

Principles of Sociology (Soc. 1)
English
Agricultural Analysis (Chem. 13a)

Dietetics (Household Science 5b)
Elementary Home Decoration (Household Science 3)
Household Management (Household Science 10)
Household Art and Clothing (Household Science 12)
General Psychology (Psychology 2)

Suggested Electives

Problems in Service of Food (Household Science 14a)
State and Local Gov't (Pol. Science 3)
Government of Illinois (Political Science 16)
Logic (Philosophy 1)
Organic Chemistry (Chem. 9 and 9c)

*Attention is called to the fact that high-school physics is a prerequisite for Household Science 1.

FOURTH YEAR

Suggested Electives	*Suggested Electives*
History of Home Economics (Household Science 13)	Teachers' Course (Household Science 11)
Economics of Family Group (Household Science 15)	Problems in the Study of Textiles (Household Science 17)
Lunch Room Management (Household Science 18a)	Seminar (Household Science 9)
Introduction to Bacteriology (Bacteriology 5)	Observation and Technique (Education 10)
English	English
Introduction to Education (Education 1)	
Food and Nutrition (Household Science 4)	

SIX-YEAR AND SEVEN-YEAR MEDICAL COURSES

The University offers a six-year and a seven-year medical course. The six-year course includes three years given at Urbana and three years in the College of Medicine in Chicago; the seven-year course includes four years at Urbana and three years in Chicago. The work given at Urbana includes substantially, in both courses, the work of the first year of a standard course in medicine, together with two years or three years in liberal arts and sciences. Students who have completed the work of the first two years and are taking the work of the third year are registered for that year as medical students in the University of Illinois College of Medicine.

A student who has completed the course outlined below and who then complete's a year's work in medicine in a recognized medical school may receive credit by transfer for this year of medical work, and thus receive the degree of Bachelor of Arts from the University of Illinois. Under this plan the student may obtain the degrees of Bachelor of Arts and Doctor of Medicine with six years' or seven years' work.

FIRST YEAR

FIRST SEMESTER	S. H.[1]	SECOND SEMESTER	S. H.[1]
General Chemistry (Chem. 1)	5	Descrip. Inorg. Chem. (Chem. 2)	2
Rhetoric (Rhet. 1)	3	Qualitative Analysis (Chem. 3)	3
Trigonometry (Math. 4)	2	Rhetoric 2	3
Zoology 1	5	Zoology 2	5
Military (Mil. 2a)	1	Military (1, 2b)	2
Physical Training	1	Physical Training	1
Total	17	Total	16

SECOND YEAR

German 1 or 4, or Latin[2]	4	German 3 or 5 or 6, or Latin[2]	4
Zoology 3	3	Zoology 6	3
Quantitative Analysis (Chem. 5a)	5	Organic Chem. (Chem. 9, 9c)	5
Physics 7a, 8a	4	Physics 7b, 8b	4
Military 2c	1	Military 2d	1
Total	17	Total	17

THIRD YEAR

German 4	4	German 5 or 6	4
Histology (Physiology 1)	5	Physiology 2	7
Physiological Chem. (Chem. 15)	7	Physiology 6	3
Psychology 1	3	Medical Bacteriology (Bacteriology 26)	5
Total	19	Total	19

FOURTH YEAR

No group requirements are *prescribed* for students who have completed the three years' course and desire to remain at the University the fourth year. Selection from the following courses is recommended: Bacteriology; Chemistry 5b, 5c, 9a, 9b, 14a-14b, 21, 22, 31, 105,

[1]Semester hours. For definition, see page 263.
[2]If Latin has not been offered for entrance.

and 106; Entomology 2, 3; Physiology 5a-5b; Psychology 113; Zoology 7, 8a-8b, 13, 14a-14b; modern languages; and studies included in Group 5 of the general course in science. Upon the completion of this fourth year, the student takes his baccalaureate degree before going to the college of medicine.

FARM ORGANIZATION AND MANAGEMENT

Students taking this course will be enrolled in the College of Agriculture and will receive the degree of Bachelor of Science from that College.

FIRST YEAR

Prescribed Subjects	Hours	*Prescribed Subjects*	Hours
Chemistry 1	5	Chemistry 2 and 3	5
Rhetoric 1	3	Rhetoric 2	3
Agronomy 25	4	Animal Husbandry 5	3
Horticulture 1a	2	Dairy Husbandry 3	1
Agricultural Extension 4	½	Horticulture 1b	2
Military	1	Agricultural Extension 4	½
Physical Training	1	Military	2
		Physical Training	1

SECOND YEAR

Prescribed Subjects	Hours	*Prescribed Subjects*	Hours
Animal Husbandry 6	3	Agronomy 26	3
Military 2	1	Military 2	1

In addition to the above courses the following are also prescribed:

	Hours	
Accountancy 11	2	
Economics 2 or 1	2-5	
Economics 16 (Sec. C)	3	
Economics 22	3	
Economics 23	2	
Economics 26	3	
		16-19 hours
Elective economics, minimum of	6	
		22-25 hours
Farm Management 1	3	
English 20	4	
Philosophy 1	3	
	10	
		10 hours
Elective science minimum	15	
Elective agriculture minimum	28	
	43	
		43 hours
Total prescribed		117-120 hours

Sufficient open electives should be chosen to complete the 130 hours required for graduation.

To avoid conflicts with other prescribed work it is suggested that the courses in economics, accountancy, and farm management be taken in the following order:

SECOND YEAR

Economics 26	3	Economics 22	3
Economics 2	2	Economics 16 (Sec. C)	3

THIRD YEAR

Accountancy 11	2	Economics 14	2
		Farm Management 1	3

FOURTH YEAR

Economics 15	2	Economics 17	2
		Economics 23	3

COURSE IN CHEMISTRY

Students who follow the General Course in the College of Liberal Arts and Sciences with chemistry as a major subject are eligible for the degree of Bachelor of Arts.

For the more specialized training of the chemist the following course, largely prescribed, has been arranged. It leads to the degree of Bachelor of Science in chemistry.

Preliminary preparation in German equivalent to two years of high-school work or one year of university work is advised. Students who are unable to offer this may take German 1 and 3 in the freshman year, but will be required to take German 4 and 5 or 6 in place of other electives.

FIRST YEAR

FIRST SEMESTER	S. H.[1]	SECOND SEMESTER	S. H.[1]
General Elementary Chemistry (Chem. 1)	5	Analytical Geometry (Math. 6)	5
Trigonometry (Math. 4)	2	Descriptive Inorganic Chemisty (Chem. 2)	2
Advanced Algebra (Math. 2)	3	Qualitative Analysis (Chem. 3)	3
German 4	4	German 5 or 6	4
Military (Mil. 2a)	1	Military 2b	1
Gymnasium (Phys. Tr.)	1	Drill Regulations (Mil. 1)	1
		Gymnasium (Phys. Tr.)	1
Total	16	Total	17

SECOND YEAR

French 1a	4	French 1b	4
Quantitative Anal. (Chem. 5a)	5	Advanced Anal. Chem. (Chem. 5b)	5
Physics 1a, 3a	5	Rhetoric 2	3
Rhetoric 1	3	Physics 1b, 3b	4
Military (Mil. 2c)	1	Military (Mil. 2d)	1
Total	18	Total	17

THIRD YEAR

Mineralogy (Geology 5)	5	Organic Chemistry (Chem. 14b, 9b)	5
Organic Chemistry (Chem. 14a, 9a)	5	Physical Chem. (Chem. 31, 33)	5
Journal Meeting (Chem. 92a)	1	Journal Meeting (Chem. 92b)	1
Economics	2	Electives	3
Differential and Integral Calculus (Math. 8)	5	English 1-2 or History 3a-3b	4
Total	18	Total	18

FOURTH YEAR

Journal Meeting (Chem. 93a)	1	Journal Meeting (Chem. 93b)	1
Thesis (Chem. 11a)	5	Ind. Chem. (Chem. 61 or Chem. 6)	2
Electives in chemistry	5	Thesis (Chem. 11b)	5
Electives, history, economics, or equivalent	5	Electives	8
Total	16	Total	16

The electives of the junior year and ten hours of the electives of the senior year must be taken elsewhere than in the department of chemistry. Some biological subject, philosophy, history, and economics are recommended.

COURSE IN CHEMICAL ENGINEERING

The work of the technical chemist or superintendent is frequently so closely associated with mechanical and other engineering lines as to make a knowledge of these subjects essential. To meet these conditions, the following four-year course in chemistry and related engineering subjects has been arranged. The degree given is that of Bachelor of Science in chemical engineering.

Preliminary preparation in German equivalent to two years of high school or one year of university work is *prescribed.* It is also advised that students

[1]Semester hours. For definition, see page 263.

intending to take this course be prepared to offer mechanical drawing and manual training for entrance.

Where this preliminary training is lacking, students are advised, if possible, to register in shop work and general engineering drawing during the early years of their course.

FIRST YEAR

FIRST SEMESTER	S. H.[1]	SECOND SEMESTER	S. H.[1]
General Elementary Chemistry (Chem. 1).	5	Analytical Geometry (Math. 6)	5
Trigonometry (Math. 4)	2	Descriptive Inorganic Chemistry (Chem. 2)	2
Advanced Algebra (Math. 2)	3	Qualitative Analysis (Chem. 3)	3
German 4	4	German 5 or 6	4
Military 2a	1	Military (Mil. 2b)	1
Gymnasium (Phys. Tr.)	1	Drill Regulations (Mil. 1)	1
		Gymnasium (Phys. Tr.)	1
Total	16	Total	17

SECOND YEAR

Differential and Integral Calculus (Math. 8)	5	Analytical Mech. (T. & A. M. 20)	3
Quantitative Anal. (Chem. 5a)	5	Advanced Analytical Chemistry (Chem. 5b)	5
Physics 1a, 3a	5	Rhetoric 2	3
Rhetoric 1	3	Physics 1b, 3b	4
Military (Mil. 2c)	1	Economics 22	3
		Military (Mil. 2d)	1
Total	19	Total	19

THIRD YEAR

Gas and Fuel Anal. (Chem. 65)	2	Physical Chem. (Chem. 31, 33)	5
Mineralogy (Geol. 5)	5	Organic Chem. (Chem. 14b, 9b)	5
Analytical Mech. (T. & A. M. 21)	2½	Dynamo Electric Machinery (E. E. 16)	4
Resistance of Mater. (T. & A. M. 25)	3½	Journal Meeting (Chem. 92b)	1
Organic Chem. (Chem. 14a, 9a)	5		
Journal Meeting (Chem. 92a)	1		
Total	19	Total	15

FOURTH YEAR

Met. Lab. and Assaying (Chem. 69)	2	Electives in chemistry	3
Electro-chemistry (Chem. 35)	3	Thesis (Chem. 11b)	5
Alternating Currents (E. E. 6)	2	Chemical Technology (Chem. 6)	2
Metallurgy (Chem. 7)	3	Industrial Chemical Lab. (Chem. 61)	2
Thesis (Chem. 11a)	5	Journal Meeting (Chem. 93b)	1
Journal Meeting (Chem. 93a)	1	Economics or philosophy	3
Totals	16	Totals	16

COURSES IN CERAMICS AND CERAMIC ENGINEERING

To graduate with the degree of Bachelor of Science in ceramics the student must follow one of the courses outlined below. The conditions are such that little election can be allowed.

Special courses will be arranged for those who wish a limited amount of work in ceramics, but those pursuing them will not be entitled to a degree and will not be recognized as graduates.

N. B.—Beginning July 1, 1915, the courses in Ceramics and Ceramic Engineering will be transferred to the College of Engineering and remodeled to bring them into conformity to the other courses in that College.

Course in Ceramics

FIRST YEAR

FIRST SEMESTER	S. H.[1]	SECOND SEMESTER	S. H.[1]
Chemistry 1b	4	Chemistry 4	4
Math. 2—Advanced Algebra	3	Math. 6—Analytic Geometry	5
Math. 4—Trigonometry	2	G. E. D. 2—Descriptive Geometry	4
General Engineering Drawing 1	4	Rhetoric 2	3
Rhetoric 1	3	Military 2b—Military Drill	1
Mil. 2a—Military Drill	1	Mil. 1—Drill Regulations	1
Ph. Tr. 1—Gymnasium	1	Ph. Tr. 2—Gymnasium	1
	18		19

[1]Semester hours. For definition, see page 263.

SECOND YEAR

Physics 1a and 3a	5	Physics 1b and 3b	4
Chemistry 6a	5	Chemistry 5b	5
Math. 8 (Calculus)	5	T. & A. M. 14—Elements of Mechanics	4
Military Drill	1	Cer. 1—Ceramic Materials	3
	16	Military Drill	1
			17

THIRD YEAR

German 4 or French 1a or 2a	4	German 6 or French 1b or 2b	4
Cer. 2—Winning and Preparation	3	Cer. 5—Ceramic Bodies	5
Cer. 3—Industrial Calculations	3	Cer. 12—Designing and Shaping	3
T. & A. M. 15—Strength of Materials	3	Cer. 17—Silicates	3
Chemistry 65	2	C. E. 96—Surveying	2
	15		17

FOURTH YEAR

Geol. 13a—Engineering Geology	3	Geol. 13b—Engineering Geology	3
Cer. 6—Glazes	5	Cer. 8—Glass	2
Cer. 10—Cements	3	M. E. 2—Steam Engines & Boilers	3
Cer. 4—Drying and Burning	4	Cer. 9—Ceramic Construction	4
Mining 3	2	Cer. 11—Thesis	5
	17		17

Course in Ceramic Engineering

FIRST YEAR

FIRST SEMESTER	S. H.[1]	SECOND SEMESTER	S. H.[1]
Chemistry 1b	4	Chemistry 4	4
Math. 2—Adv. Algebra	3	Math. 6—Analytic Geometry	5
Math. 4—Trigonometry	2	G. E. D. 2—Descriptive Geometry	4
General Engineering Drawing 1	4	Rhetoric 2	3
Rhetoric 1	3	Mil. 2b—Military Drill	1
Mil. 2a—Military Drill	1	Mil. 1—Drill Regulations	1
Ph. Tr. 1—Gymnasium	1	Ph. Tr. 2—Gymnasium	1
	18		19

SECOND YEAR

Physics 1a and 3a	5	Physics 1a and 3a	4
Chemistry 5a	5	Chemistry 5b	5
Math. 7—Calculus	5	Math. 9—Calculus	3
Military Drill	1	T. & A. M. 20—Elements of Mechanics	3
	16	Cer. 1—Ceramic Materials	3
		Military Drill	1
			19

THIRD YEAR

German 4 or French 1a or 2a	4	German 6 or French 1b or 2b	4
Cer. 2—Winning & Preparation	3	Cer. 5—Ceramic Bodies	5
Cer. 3—Industrial Calculations	3	Cer. 12—Designing & Shaping	3
T. & A. M. 21—Analytical Mechanics	2	Cer. 17—Silicates	3
T. & A. M. 25—Resist. of Materials	4	C. E. 96—Surveying	2
	16		17

FOURTH YEAR

Geol. 13a—Engineering Geology	3	Geol. 13b—Engineering Geology	3
Cer. 6—Glazes	5	Cer. 9—Ceramic Construction	4
Cer. 10—Cements	3	Cer. 8—Glass	2
Cer. 4—Drying and Burning	4	M. E. 2—Steam Engines & Boilers	3
Min. 3—Mining Methods	2	Cer. 11—Thesis	3
	17		15

COMBINED ARTS AND ENGINEERING COURSE

A graduate of the College of Liberal Arts and Sciences whose mathematical training includes the work of the calculus, who has had the usual college course in physics, and sufficient training in the principles of mechanics to enable

[1]Semester hours. For definition, see page 263.

him to begin the mechanics of the junior year, may receive the degree of Bachelor of Science in the departments of the College of Engineering upon the completion of sixty-eight credit hours in such lines (including thesis) as may be directed by the faculty. This work may ordinarily be done in two academic years. Candidates for the degree in the department of architecture are not required to be prepared in calculus or mechanics, but should possess special preparation in drawing. The courses in the College of Engineering which may be counted for the degree of A.B. are listed on page 128 above.

PREPARATION OF TEACHERS

For information concerning the preparation of teachers and the recommendation of the University committee on appointments, see page 202.

HONORS

The Honor Degree

The faculty of the College of Liberal Arts and Sciences continues for 1914-15 the system formerly carried on by the College of Literature and Arts of recommending candidates for the degree of Bachelor of Arts with honors in a particular subject, under the following conditions:

1. The amount of work required in the honor subject shall be that required for a major in that subject.

2. The candidate must also offer two minor subjects. Not less than 9 hours will be accepted in either subject, and the aggregate for both subjects must be at least 24 hours.

3. The work done in the minor subjects must be of a distinctly superior quality; grades of at least 85 are required in all the minor subjects; especially poor or careless work in any other subject may, by vote of the faculty, cause the honor degree to be withheld.

4. Each candidate is required to present an acceptable thesis in his major subject; the thesis may be written in connection with some recognized course in the department.

5. The honor subjects at present recognized in this College are as follows: The classics (either the classics as a whole, or Greek or Latin separately), economics, education, English, German, French, history, mathematics, philosophy, political science, psychology, sociology. The specific requirements for honors in particular subjects are stated in connection with the description of courses for the several departments beginning on page 261 below.

The purpose of these honors is not to encourage premature specialization, but to give special recognition to students who have pursued with success correlated courses of study, and to emphasize the importance, for scholarship in any subject, of thorough training in other related subjects. Candidates should announce their intention as early as possible in their college course and consult freely with the head of the department concerned in regard to the selection of their studies.

Preliminary Honors

The University regulations regarding preliminary honors are stated above, page 94.

Freshman Honors

At the close of each year a list of those members of the freshman class who have made an especially good record in scholarship is prepared. The names of such students are announced at an assembly of the College; notice is also sent in each case to the parent or guardian, and to the principal of the high school of which the student is a graduate.

Honorary Societies

For information concerning the honorary societies represented in the University, see page 111.

THE COLLEGE OF ENGINEERING

For a description of the *buildings* used by this College, see page 51; for collections belonging to it (architecture, civil engineering, electrical engineering, mechanical engineering, and railway engineering), see page 60; for *clubs* and *societies auxiliary to its course of study,* see page 112; for *fees,* see page 118; for *honors,* see page 94; for *honorary societies,* see page 111.

GENERAL STATEMENT

The purpose of the College is to train men for the profession of engineering. In arranging its courses of study and practise, cultural subjects are interwoven with the theoretical subjects which underlie and reinforce the practical developments of the several departments. The instruction of the classroom and the practise afforded by the library, the drafting-room, and the laboratory proceed hand in hand. Throughout his course the student works upon problems and proceeds by methods similar to those which enter into the experience of the practising engineer.

ADMISSION

See the general statement of the entrance requirements of the University, pages 69 to 91.

SPECIAL STUDENTS

See the statement of the general regulations of the University in regard to special students, page 75.

DESCRIPTION OF DEPARTMENTS

The College of Engineering comprises the following departments:*

Department of Architecture, with courses in—
- Architecture
- Architectural Engineering

Department of Civil Engineering

Department of Electrical Engineering

Department of Mechanical Engineering

Department of Mining Engineering

Department of Municipal and Sanitary Engineering

Department of Theoretical and Applied Mechanics

Department of Physics

Department of Railway Engineering,† with courses in—
- Railway Civil Engineering
- Railway Electrical Engineering
- Railway Mechanical Engineering

*After July 1, 1915, the Department of Ceramics will become a department in the College of Engineering.

†The School of Railway Engineering and Administration offers, in addition to the three courses named here, courses in railway transportation and railway traffic and accounting under the direction of the department of economics of the College of Liberal Arts and Sciences. See pages 138-139 above.

ARCHITECTURE

The department of architecture offers two courses leading to the first degree, the course in architecture and the course in architectural engineering. The aim of these courses is to give the broadest preparation for the practise of architecture.

The course in architecture aims primarly to train the student to produce correct, thoughtful, and beautiful works of architecture. The schedule of studies includes a broad field of liberal and scientific subjects to supply the background for creative work and to give a knowledge of the principles involved in the processes of safe and economical construction. The course also includes much freehand drawing for the purpose of training the eye to recognize correct proportion and training the hand to skillful and rapid drawing. The main portion of the course, however, consists of the study of architectural forms and principles and their application in architectural design.

The course in architectural engineering gives a thorough groundwork in mathematics and applied mechanics, and includes such studies as strength of materials, bridge, mill, and tall building construction, reinforced concrete, etc. The general principles of these subjects are applied to all forms of building construction in a course given in the senior year, known as architectural engineering. While specializing in construction, this course includes also the study of the forms and principles of architecture through such subjects as free-hand drawing, architectural history, architectural drawing, and architectural design.

Both courses in architecture prepare the student for the examinations of the Illinois State Board of Examiners of Architects, and graduates of the department are exempt from examinations required for entrance into the American Institute of Architects, and from the preliminary examination for the prize in Architecture of the American Academy at Rome. The Plym Fellowship in Architecture is awarded annually to a graduate of the department. This prize amounts to $1,000 and provides for one year of travel for the study of architecture abroad. It is awarded by competition.

Students intending to take up the study of architecture should take free-hand and mechanical drawing and general history in high school.

Equipment

The collections of rendered and working drawings, lantern slides, plates, photographs, casts, specimens of American woods, building materials, and appliances are noted under "Collections" on page 60. A Zeiss epidiascope is used for direct projection of photographs, colored plates, etc., and a double electric lantern for projecting two pictures on the screen at once for comparative study. Geometrical and architectural models are lighted by a light fixed at the conventional angle for demonstration of the subjects of shades and shadows and conventional rendering. Wall space in the corridors of the department and in all drafting rooms has been prepared for exhibition purposes, and collections of drawings are constantly displayed. The department occupies the entire fourth floor of Engineering Hall, and a large part of the third; its quarters include drafting rooms for undergraduate and graduate work, library, lecture rooms, studios for free-hand drawing, etc.

CIVIL ENGINEERING

The purpose of this department is to furnish a course of theoretical instruction, accompanied and illustrated by a large amount of practise. While the

instruction aims to be practical by giving the student information and practise directly applicable in his future professional work, the prime object is the development of the mental faculties. The power to acquire information and the ability to use it are held to be of greater value than any amount of so-called practical knowledge.

Equipment

This department has an equipment of compasses, engineers' transits, solar transits, levels—ordinary and precise—plane tables and sextants, as well as a collection of structural shapes, including full-sized joints of an actual railroad bridge, sections of columns, eye-bars, etc., and also photographs and blue-prints of bridges and buildings.

The *cement laboratory* occupies a room in the Mechanical Engineering Laboratory, and is provided with slate tables, testing machines, molding machines, sieves, etc., and sample barrels of hydraulic cement, varieties of sand, and other necessary materials.

The *road laboratory* occupies a room in the Mechanical Engineering Laboratory, and is provided with machines for testing the resistance of macadam material to impact and abrasion and for making the cementation test. The laboratory is also supplied with rattlers and other devices for testing paving material; and with equipment for testing oils, tars, and asphalts.

ELECTRICAL ENGINEERING

This department provides a course of study in theoretical and applied electricity. The first two years of work are substantially the same as in the other engineering courses, including practical work in drafting room and shop, as well as instruction in the fundamental principles of mathematics and physics. With the third year the fundamental studies relate more directly to electrical engineering. A course in dynamo machinery is followed by the theory of alternating currents, while laboratory and design courses emphasize underlying principles. Technical courses cover the generation, transmission, and distribution of electric power, and its various applications. In the laboratory a study of dynamo characteristics is followed in the fourth year by progressive experiments involving the operation of electrical machinery in principle and practise. Investigation of the problems of power distribution is a feature of advanced laboratory and thesis work.

Equipment

The 500-kilowatt power plant of the University supplies the electrical engineering laboratory with the current needed for its operation.

The power equipment in the electrical engineering laboratory includes forty direct current machines with a total capacity of 375 kilowatts, twenty alternating current machines with a total capacity of 300 kilowatts, and fifty transformers with a total capacity of 350 kilowatts. A 17-panel experimental switchboard affords adequate distribution and control.

The instrument room contains standards for the calibration of commercial instruments of all types. There are two hundred and fifty portable instruments for experimental work. A new 240 ampere-hour storage battery has been installed. The graduate laboratory contains apparatus for research work, includ-

ing four oscillographs, one 2,000-cycle alternator, one 200,000-volt transformer, one 1,000-ampere direct current generator, and apparatus for high voltage direct current investigations. The photometer room contains apparatus for tests of the various light sources. Two special 100-line switchboards are connected with cables and apparatus for experiments in telephony. The equipment for electrometallurgical work includes one 30-kilowatt induction furnace, one 25-kilowatt arc furnace, two 30-kilowatt resistance furnaces, one 15-kilowatt vacuum furnace for melting, one 30-kilowatt vaccum furnace for annealing, and one 1.5 kilowatt muffle furnace.

MECHANICAL ENGINEERING

The courses in mechanical engineering are planned to present the theory and practise involved in the generation and transmission of power, and in the design, construction, operation, and testing of machinery of all kinds.

Equipment

To supplement and amplify the theoretical work of the class room, the department is provided with designing rooms and laboratories as follows:

The Designing Rooms are equipped with drawing tables, and are supplied with reference books, files of trade catalogs, gear charts, and collections of blue-prints. A collection of kinematic models, sectional steam specialties, lantern slides, and photographs is also available.

The Mechanical Engineering Laboratory is equipped with machines and testing instruments for instruction in steam engineering, gas power engineering, refrigeration, heating, and ventilation. Among the more important pieces of apparatus are the 210-h. p. experimental boiler, equipped with chain-grate stoker, fuel economizer, and induced draft; a separately fired steam superheater; a number of types of throttling, high speed automatic, and Corliss steam engines; several steam condensers; a compound two-stage air compressor; a large compound duplex steam pump; a Kerr steam turbine; a DeLaval turbopump; a 200,000-lb. Lea water-flow; a 10-ton ammonia compression refrigerating machine; a number of typical gas, gasoline, and oil engines; a 50-h. p. suction gas producer, and several house-heating boilers and furnaces. The central heating and power plant contains a variety of types of boilers, stokers, pumps, and engines in commercial service.

The Shop Laboratories are provided with suitable machinery and apparatus to illustrate the several shop processes involved in the manufacture of machinery. In these laboratories emphasis is given to the engineering principles involved in machine construction and to the important problems of scientific shop management. These laboratories include the *Wood Shop* with an equipment of benches, lathes, machinery, and small tools needed in pattern construction; the *Foundry* equipped with cupola, brass furnaces, core ovens, molding machines, and facilities for bench and floor molding; the *Forge Shop* equipped with forges, anvils and small tools, a steam hammer, a power-driven punch and shear, and with gas and electric furnaces; and the *Machine Shop* with an equipment of lathes, planers, shapers, milling machines, grinders, boring mills, drill presses, and with typical small tools and fixtures used in manufacturing.

MECHANICS, THEORETICAL AND APPLIED

The courses in theoretical and applied mechanics are designed to meet the needs of the students of engineering.

The *Laboratory of Applied Mechanics* comprises the materials testing laboratory and the hydraulics laboratory. The equipment of the materials testing laboratory includes testing machines and accessory apparatus for making physical tests of materials of construction, such as tension, compression, flexure, shearing, torsion, hardness, and impact tests, and tests under repeated load. The laboratory contains machines of large capacity for testing full size structural and machine members. Among these is a universal machine of 600,000-pound capacity. The hydraulics laboratory has facilities for furnishing water under a large range of pressures and volumes. There is an excellent equipment of devices for measuring and recording the flow of water, including measuring pits, water meters, weir channels, nozzles, pitometer, and Venturi meters. In the equipment are a variety of pumps, a standpipe, several water motors, and a turbine water wheel for testing purposes. A sufficient supply of pressure gauges, weighing scales and other auxiliary apparatus is provided.

MINING ENGINEERING

The department of mining engineering offers courses of instruction relating to the science and practise of mining and metallurgy to train men for the various phases of the mineral industry.

The work of the department adds to the usual preliminary courses in mathematics, languages, chemistry, physics, geology, and general engineering, specialized work in mining, such as mine surveying, mining methods, mine ventilation, mining machinery, coal washing and ore concentration, metallurgy, utilization of fuels, administration and organization of mines, mining law, and the design of mining and metallurgical structures.

In addition to its work of instruction, the department concerns itself with the development and dissemination of such scientific facts as are likely to be of service in improving the practise of mining, with reference to efficiency in operation, to the security of life in the mines, and to the conservation of the mineral resources of the State.

Equipment

The drawing rooms contain the catalogs of the manufacturers of mining machinery with a complete card index, the standard reference books on mine drafting, models of mine structures, and a collection of blue-prints and drawings of mine structures.

The mine-gas and safety-lamp laboratory contains safety lamps of different types, electric and magnetic locking appliances, a photometer, a dark room for photometric work, Ryan, Oldham and Hailwood safety-lamp testing apparatus, and appliances for gas and dust analysis and explosibility tests.

The coal washing and ore dressing laboratory contains for crushing, rolls, gyratory and jaw crushers, and a 500-pound 3-stamp battery; for screening and sizing, trommels, shaking and vibrating screens, and V boxes; for concentrating and cleaning, pan, piston and pulsating jigs, bumping table, vanner, concentrating table, and slimer. These machines can handle from 3 to 5 tons of coal and one ton of ore an hour. There is also a complete sampling and

drying equipment, a cyanide testing plant, a Huff electrostatic machine, and other small appliances used for preliminary testing. Adjoining this laboratory is a chemical and assay laboratory equipped for the analytical work required in connection with coal washing and ore concentration.

The explosives and drilling laboratory contains the principal types of rock and coal drills, a diamond drill, chain and puncher, coal cutters, and a complete outfit for demonstrating the use of explosives.

MINE RESCUE STATION AND LABORATORIES

Cooperating with the department of mining engineering and with the State Geological Survey, the Federal Government in 1909 establishd at the University a mine rescue station in charge of a resident mining engineer. The purpose of the station was to interest all connected with the mining industry in such modern appliances as breathing and resuscitation apparatus, as part of the normal equipment of mines. At the station mine bosses and others were trained in the use of such apparatus, this service being rendered freely to all who desired the benefits thereof.

A direct outcome of the cooperative rescue station has been the establishment of a comprehensive mine rescue service by the State of Illinois. This state service has rendered unnecessary the maintenance of the cooperative rescue station in Urbana. The station is now maintained by the University for the training of students, but the Bureau of Mines keeps certain apparatus on exhibition.

The Cooperative Investigation of Illinois mining conditions is another direct outgrowth of the mine rescue station. This cooperation between the University of Illinois, the Illinois State Geological Survey and the United States Bureau of Mines has for the past three years carried on an investigation of the coal resources and the mining practise in the state.

A laboratory has been maintained by the Cooperation for the study of mine dusts and mine gases. This laboratory is also available for the use of mining classes in the University. The Bureau of Mines has stationed in Urbana a resident mining engineer and a chemist.

MUNICIPAL AND SANITARY ENGINEERING

This course is designed to train for the varied duties of the engineer employed on the design, construction, and operation of public works and public utilities, and for general engineering work.

The methods of training are intended to develop power to take up and solve new problems connected with municipal public works, as well as to design and to superintend the ordinary constructions. Surveying, structural materials, and structural design are taught as in the civil engineering course. Chemistry and bacteriology are given so far as is necessary to a comprehension of the questions involved in water supply and sewage disposal; and instruction is given in mechanical and electrical engineering in the generation and transmission of power.

PHYSICS

The department of physics occupies the Laboratory of Physics. This building supplies facilities and equipment for instruction and investigation in phys

ics. Gas, distilled water, compressed air and vacuum, and direct and alternating electric currents of a wide range in amperes and in volts are available in all parts of the building. There is a collection of over 4,000 pieces of apparatus for the courses of instruction offered and also for advanced work, and only a small part of the equipment is antiquated. New investigations can usually be started with the apparatus on hand. There are two workshops, one for the advanced students and instructors, and one for the mechanicians of the department. The students' shop is equipped with lathes, drill press, bench tools, etc. The mechanicians' shop contains lathes, milling machines, drill press, and other facilities for fine machine work.

The University library contains all the important sets of journals of physics and the related sciences in English, French, and German. The recent volumes of the physical journals, together with a collection of text-books, encyclopedias, dictionaries, and other reference books, are also found in the special library of the Laboratory.

RAILWAY ENGINEERING*

The department of railway engineering is organized to serve those who wish to prepare themselves for service in the technical departments of railways. The course in railway civil engineering adds to the fundamentals of a well-rounded engineering course a group of special subjects which concern the location, construction, and maintenance of railways. The course in railway electrical engineering deals with the design and construction of electric railway equipment; the operation and performance of electric cars and locomotives; and the development of the more general problems which arise in the electrification of existing steam lines. The course in railway mechanical engineering is intended to meet the requiremnts of those who are especially interested in steam railroad equipment. It deals with the design, construction, and maintenance of various types of railway cars; with conditions affecting train resistance; with the design and operation of steam locomotives; and with tests disclosing their performance.

Equipment

Three steam roads—the Illinois Central, the Cleveland, Cincinnati, Chicago & St. Louis, and the Wabash railroads—and two electric interurban roads —the Illinois Traction System and the Kankakee and Urbana railway—enter Champaign and Urbana. The department enjoys the interest and cooperation of the officers of these railways, and is afforded by their courtesy numerous opportunities for practical road tests and field work. The division shops of the C., C., C. & St. L. railroad are located at Urbana and provide additional opportunity for similar work.

The department owns and operates, jointly with the Illinois Central Railroad, a railway test car designed for experimental work on steam roads. It is fully equipped for making train resistance and locomotive performance tests, and during the last eleven years has been in frequent operation in carrying on resistance and tonnage rating tests on the Illinois Central Railroad and on several eastern roads.

For work on electric roads the department owns also an electric test car, of the interurban type, especially designed and built for the University for

*See also School of Railway Engineering and Administration, page 205.

experimental work. It is equipped with four 50 horse-power direct current motors and with the Westinghouse multiple control system, and is provided with instruments for recording power, speed, acceleration, and the other data needed in road tests. Through the courtesy of the Illinois Traction System this car is operated on its lines, which enter the campus of the University.

The department laboratory equipment includes a drop-testing machine and a brake-shoe testing machine, both constructed in accordance with the standards of the Master Car Builders Association. The drop-testing machine is designed for use in testing the strength of railroad rails, car axles, car couplers, and draft gears; and may be used in studies of the physical properties of structural materials of any sort. The brake-shoe testing machine supplies means for determining the wearing properties and frictional qualities of brake-shoes, such as are employed in regular service on railroad trains.

A locomotive testing plant, equipped from the original designs of the department, occupies a building 40 by 115 feet. The plant is devoted exclusively to making tests to determine the performance of locomotives. The locomotives tested are furnished by certain western railroad systems under an arrangement which insures the maintenance in the plant of a locomotive of latest design.

Much of the work in the railway courses is given in the departments of civil, electrical, and mechanical engineering, and the shop and laboratory equipment of these departments is available for students of the railway department.

APPROVED NON-TECHNICAL ELECTIVES

The following is a list of approved non-technical electives for students in the College of Engineering. In general, prerequisites must be observed.

Accountancy 10; Astronomy 3, 6, 7; Botany 5; Chemistry 16, 5a or 13a, 10b, 6, 7, 8, 31, 35, 65, 66, 69, 77, 78; Economics 1, 2, 3, 10, 12, 21, 25, 41; Education 1, 2, 16, 25, 41; English, any intermediate or advanced courses; French, any advanced courses; Geology 2, 5a, 13a, 13b, 14, 24; (for students in mining any course in geology for which student has prerequisite); German, any third or fourth year courses; History 3; Italian 2; Mathematics 10, 16, 17, 19, 21, 23, 27; Philosophy 1, 17; Psychology 1, 2, 3, 4; Physics 14, 16, 17, 19, 21, 23, 27; Political Science 1, 3, 4; Rhetoric 17; Spanish 3, 4; Sociology 1, 3.

SUMMER READING

All engineering students not graduates of a literary college are required to complete prescribed courses of reading of a non-professional character during the summer vacations following the freshmen and sophomore years. The purpose of the summer reading is to increase the acquaintance of the student with literature, history, and general science, to develop in him a taste for such reading, and to impress him with the importance of such knowledge not only as a source of individual enjoyment, but as a practical aid to engineers in their social and business relations.

A circular on summer reading is issued, containing a list of books from which the student may choose. The books have been selected for their value in providing general training, but an attempt has been made to include only readable and attractive works. A statement of the books read during the summer is required at the beginning of the next college year.

GENERAL ENGINEERING LECTURES FOR FRESHMEN

One general lecture, sufficiently popular in character to interest and inspire young engineers, will be given each week. All freshman engineers are expected to attend this lecture.

TRIPS OF INSPECTION

Beginning with the academic year 1915-1916, inspection trips, which have heretofore been optional with students in the College of Engineering, will become one of the regular requirements in the senior year of the course leading to the degree of Bachelor of Science in architecture, architectural engineering, civil engineering, electrical engineering, mechanical engineering, mining engineering, and municipal and sanitary engineering. Such trips are required because it is believed that the educational advantage resulting from an inspection of large industrial enterprises fully justifies the time and expense involved.

The time required for these trips is three or four days, and the plants visited are usually in Chicago or Milwaukee. The trips are taken during term time under the supervision of University authorities. The expense of these trips to each student is small, varying from $15.00 to $25.00.

COURSES OF STUDY AND DEGREES

The courses of study leading to the degree of Bachelor of Science in the College of Engineering, as scheduled for the year 1914-15, are given herewith in full. Each of the ten courses given may ordinarily be completed in a period of four years.

A graduate of the University of Illinois in architectural, civil, electrical, mechanical, mining, municipal and sanitary, or railway engineering may receive the degree of an allied course upon the completion of from thirty to thirty-six semester hours of work approved by the faculty. This work may ordinarily be done in one academic year.

A graduate of the College of Liberal Arts and Sciences of the University of Illinois, or of any college of equal standing, whose mathematical training includes the work of the calculus, who has had the usual course in physics, and who has had sufficient training in the principles of mechanics to enable him to begin the mechanics of the junior year, may receive the degree of Bachelor of Science in Engineering upon the completion of sixty-eight credit hours of work in engineering under the direction of the faculty. This work may ordinarily be done in two academic years. Candidates for the degree in the department of architecture are not required to be prepared in calculus or mechanics, but should have special preparation in drawing.

Course in Architecture

FIRST YEAR

FIRST SEMESTER	S. H.[1]	SECOND SEMESTER	S. H.[1]
Arch. 31[2]—Arch. and Freehand Drawing..	4	Arch. 32—Arch. and Freehand Drawing..	4
G. E. D. 2—Descriptive Geometry.....	4	Chem, 1a[3] or 1b—Inorganic Chemistry....	4
Math. 2—Advanced Algebra.....	3	Rhet. 2 (1)—Rhetoric and Themes.....	3
Math. 4—Trigonometry	2	T. & A. M. 14—Elem. Mechanics.....	4
Rhetoric 1—Rhetoric and Themes.....	3	Mil. 1—Drill Regulations.....	1
Mil. 2a—Military Drill.....	1	Mil. 2b—Military Drill.....	1
Phys. Tr. 1—Gymnasium	1	Phys. Tr. 2—Gymnasium.....	1
Total.....	18	Total.....	18

Summer Reading, 50 points

[1]Semester hours. For definition, see page 263.
[2]The numbers refer to courses in the Description of Courses, page 261.
[3]Students who have had chemistry in the high school equivalent to Chemistry 1b will register in Chemistry 1a.

SECOND YEAR

Arch. 13—History of Architecture	2	Arch. 14—History of Architecture	2
Arch. 23—Freehand Drawing	2	Arch. 24—Freehand Drawing	2
Arch. 33—Design	3	Arch. 34—Design	3
Arch. 43—Working Drawings	3	Arch. 44—Working Drawings	3
Phys. 9a—Physics Lectures	2	Phys. 9b—Physics Lectures	2
Phys. 10a—Physics Laboratory	2	Phys. 10b—Physics Laboratory	2
T. & A. M. 15—Strength of Materials	3	T. & A. M. 16—Strength of Materials	3
Mil. 2c—Military Drill	1	Mil. 2d—Military Drill	1
Total	18	Total	18

Summer Reading, 50 points

THIRD YEAR

Arch. 15—History of Architecture	2	Arch. 16—History of Architecture	2
Arch. 25—Freehand Drawing	2	Arch. 26—Freehand Drawing	2
Arch. 35—Design	5	Arch. 36—Design	5
Arch. 45—Graphic Statics	3	Arch. 46—Graphic Statics	3
Arch. 55—Building Sanitation	1	Arch. 66—Theory of Architecture	1
Arch. 65—Theory of Architecture	1	E. E. 9—Building Illumination	1
French or German	4	French or German	4
Total	18	Total	18

FOURTH YEAR

Arch. 27—Freehand Drawing	2	Arch. 28—Freehand Drawing	2
Arch. 37—Design	7	Arch. 38—Advanced Design or Thesis	7
Arch. 67—Theory of Form and Color	2	Arch. 60—Estimating	1
Econ. 2—Principles of Economics	2	Arch. 68—Specifications	3
M. E. 25—Heating and Ventilation	2	Elective	3
Elective	3	Total	16
Total	18		

Course in Architectural Engineering as Taught in 1914-15

The following schedule does not show the full course for 1915, but indicates the work each class must take in 1914-15, during the transition from the old to the new course. This schedule cannot be used for checking up a student's previous work in his course or planning the work of subsequent years.

FIRST YEAR

FIRST SEMESTER	S. H.[1]	SECOND SEMESTER	S. H.[1]
A. E. 31[2]—Arch. and Freehand Drawing	4	G. E. D. 2[2]—Descriptive Geometry	4
Language	4	Language	4
Math. 2—Advanced Algebra	3	Math. 6—Analytical Geometry	5
Math. 4—Trigonometry	2	Rhet. 2 (1)—Rhetoric and Themes	3
Rhet. 1—Rhetoric and Themes	3	Mil. 1—Drill Regulations	1
Mil. 2a—Drill	1	Mil. 2b—Drill	1
Phys. Train. 1—Gymnasium	1	Phys. Train. 2—Gymnasium	1
Total	18	Total	19

SECOND YEAR

Arch. 13 (6)—History of Architecture	2	Arch. 14 (6)—History of Architecture	2
A. E. 33—Elementary Design	3	A. E. 34—Elementary Design	3
A. E. 43—Working Drawings	2	A. E. 44—Working Drawings	2
Math. 7—Differential Calculus	5	Math. 9—Integral Calculus	3
Phys. 1a—Physics Lectures	3	Physics 1b—Physics Lectures	2
Phys. 3a—Physics Laboratory	2	Physics 3b—Physics Laboratory	2
Mil. 2c—Drill	1	T. & A. M. 20—Analytical Mechanics	3
		Mil. 2d—Drill	1
Total	18	Total	18

[1]Semester hours. For definition, see page 263.

[2]The numbers refer to courses in the Description of Courses, page 261. Numbers in parenthesis are old numbers.

THIRD YEAR

Arch. 6a—History of Architecture	4
Arch. 11a—Architectural Seminar	1
A. E. 45—Graphic Statics	3
Chem. 1a or 1b—Inorganic Chemistry	4
Econ. 2—Principles of Economics	2
T. & A. M. 25 (9)—Res. of Materials	4
Total	18

Arch. 6b—History of Architecture	4
Arch. 11b—Architectural Seminar	1
A. E. 46 (5)—Graphic Statics	3
Non-technical Elective	2
M. E. 2 (11)—Steam Engines and Boilers	3
T. & A. M. 26 (8)—Analytical Mech	4
Total	17

FOURTH YEAR

Arch. 19a—Architectural Engineering	3
Arch. 30a—Thesis or approved elective	1
Arch. 34a—Arch. Eng. Sem	1
C. E. 12—Bridge Analysis	2
C. E. 13—Bridge Details	2
C. E. 24—Metal Structures	1
Non-technical Elective	1
M. E. 67—Mech. Eng. Lab	1
M. E. 26—Heating and Ventilation	3
Total	15

Arch. 19b—Architectural Engineering	3
Arch. 30b—Thesis or approved elective	3
Arch. 68—Specifications	3
C. E. 6c—Masonry and Reinf. Con. Design	2
C. E. 14a—Bridge Design	2
E. E. 9—Electric Lighting	1
Non-technical Elective	1
Total	15

Course in Architectural Engineering as Taught in 1915-16

FIRST YEAR FOR THE CLASS OF 1919

FIRST SEMESTER	S. H.[1]
A. E. 31[2]—Arch. and Freehand Drawing	4
Language	4
Math. 2—Advanced Algebra	3
Math. 4—Trigonometry	2
Rhet. 1—Rhetoric and Themes	3
Mil. 2a—Military Drill	1
Phys. Tr. 1—Gymnasium	1
Total	18

SECOND SEMESTER	S. H.[1]
G. E. D. 2—Descriptive Geometry	4
Language	4
Math. 6—Analytical Geometry	5
Rhet. 2—Rhetoric and Themes	3
Mil. 1—Drill Regulations	1
Mil. 2b—Military Drill	1
Phys. Tr. 2—Gymnasium	1
Total	19

Summer Reading, 50 points

SECOND YEAR FOR THE CLASS OF 1918

Arch. 13—History of Architecture	2
A. E. 33—Arch. and Freehand Drawing	3
A. E. 43—Working Drawings	2
Math. 7—Differential Calculus	5
Phys 1a—Physics Lectures	3
Phys. 3a—Physics Laboratory	2
Mil. 2c—Military Drill	1
Total	18

Arch. 14—History of Architecture	2
A. E. 34—Design	3
A. E. 44—Working Drawings	2
Math. 9—Integral Calculus	3
Phys. 1b—Physics Lectures	2
Phys. 3b—Physics Laboratory	2
T. & A. M. 20—Analytical Mechanics	3
Mil. 2d—Military Drill	1
Total	18

Summer Reading, 50 points

THIRD YEAR FOR THE CLASS OF 1917

Arch. 15 (6)—History of Architecture	2
A. E. 45 (5)—Graphic Statics	3
Chem. 1a or 1b—Inorganic Chemistry	4
Non-technical Elective	2
Rhet. 1 (1)—Rhetoric and Themes	3
T. & A. M. 25 (9)—Resistance of Materials	4
Total	18

Arch. 16 (6)—History of Architecture	2
A. E. 46 (5)—Graphic Statics	3
Chem. 4—Qualitative Analysis	4
Non-technical Elective	2
Rhet. 2 (1)—Rhetoric and Themes	3
T. & A. M. 26 (8)—Analytic Mechanics and Hydraulics	4
Total	18

FOURTH YEAR FOR THE CLASS OF 1916

Arch. 19a—Arch. Eng	3
Arch. 30a—Thesis or approved elective (C. E. 5*l*)	1
Arch. 34a—Arch. Eng. Seminar	1
C. E. 12—Bridge Analysis	2
C. E. 13—Bridge Details	2
C. E. 24—Metal Structures	1
L. A. & S.—Option	1
M. E. 67—Mech. Eng. Laboratory	1
M. E. 26—Heating and Ventilating	3
Total	15

Arch. 19b—Arch. Eng	3
Arch. 30b—Thesis or approved elective (C. E. 6c)	3
Arch. 68—Specifications	3
C. E. 6c—Masonry and Reinforced Concrete Design	2
C. E. 14a—Bridge Design	2
E. E. 9—Electric Lighting	1
L. A. & S.—Option	1
Total	15

[1]Semester hours. For definition, see page 263.
[2]The numbers refer to courses in the Description of Courses, page 261.

Course in Civil Engineering, as Taught in 1914-15

FIRST YEAR

FIRST SEMESTER	S. H.[1]	SECOND SEMESTER	S. H.[1]
Chem. 1a[2] or 1b—Inorganic Chemistry	4	Chem. 2 and 3—Inorganic Chemistry	4
G. E. D. 1—Gen. Eng. Drawing	4	G. E. D. 2—Descriptive Geometry	3
Language	4	Language	4
Math. 2—Advanced Algebra	3	Math. 6—Analytic Geometry	5
Math. 4—Trigonometry	2	Mil. 1—Drill Regulations	1
Mil. 2a—Military Drill	1	Mil. 2b—Military Drill	1
P. T. 1—Gymnasium	1	P. T. 2—Gymnasium	1
Total	19	Total	20

Summer Reading, 50 points

SECOND YEAR

C. E. 27—Plane Surveying	3	C. E. 28—Higher Surveying	3
Math. 7—Differential Calculus	5	Math. 9—Integral Calculus	3
Phys. 1a—Physics Lecture	3	Phys. 1b—Physics Lecture	2
Phys. 3a—Physics Laboratory	2	Phys. 3b—Physics Laboratory	2
Rhet. 1—Rhetoric and Themes	3	Rhet. 2—Rhetoric and Themes	3
Mil. 2c—Military Drill	1	T. & A. M. 20—Analytic Mechanics	3
Elective	2	Mil. 2d—Military Drill	1
Total	19	Elective	2
		Total	19

Summer Reading, 50 points

THIRD YEAR

Chem. 1b[3] or 1a—Inorganic Chemistry	4	C. E. 52—Roads and Pavements	3
C. E. 51—Railroad Surveying	5	C. E. 60—Structural Stresses	4
M. E. 1—Steam Engines and Boilers	3	C. E. 62—Structural Details	2
T. & A. M. 21—Analytic Mechanics	2	C. E. 70—Seminar	1
T. & A. M. 29—Resistance of Materials	5	T. & A. M. 10—Hydraulics	3
Total	19	Elective	3
		Total	16

FOURTH YEAR

C. E. 5r—Masonry Construction	4	C. E. (6b)—Masonry and Reinforced Concrete Design	2
C. E. 5*l*—Cement Laboratory	1	C. E. 14—Bridge Design	5
C. E. 12—Bridge Analysis	2	C. E. 15[5]—Advanced Bridge Analysis	2
C. E. 13[4]—Bridge Details	2	C. E. 16—Engineering Contracts and Specifications	2
C. E. 6a—Theory of Reinforced Concrete	1	C. E. 25—Seminar	1
C. E. 24—Steel Building Design	2	C. E. 30—Thesis*	2
Inspection Trip		M. & S. E. 3—Sewerage	3
C. E. (30)—Thesis*	1	Total	17
M. & S. E. 2—Water Supply Engineering	4		
Total	17		

Course in Civil Engineering as Taught in 1915-16

FIRST YEAR FOR THE CLASS OF 1919

FIRST SEMESTER	S. H.[1]	SECOND SEMESTER	S. H.[1]
Chem. 1a or 1b—Inorganic Chemistry	4	Chem. 2 & 3—Inorganic Chemistry	4
G. E. D. 1—General Engineering Drawing	4	G. E. D. 2—Descriptive Geometry	4
Rhet. 1—Rhetoric and Themes	3	Rhet. 2—Rhetoric and Themes	3
Math. 2—Advanced Algebra	3	Math. 6—Analytical Geometry	5
Math. 4—Trigonometry	2	Mil. 1—Drill Regulations	1
Mil. 2a—Military Drill	1	Mil. 2b—Military Drill	1
P. T. 1—Gymnasium	1	P. T. 2—Gymnasium	1
Total	18	Total	19

[1]Semester hours. For definition, see page 263.

[2]The numbers refer to courses in the Description of Courses, page 261. Numbers in parenthesis are old numbers.

[3]Students who have had chemistry in the high school equivalent to Chemistry 1b will register in Chemistry 1a; those who have received credit for Chemistry 1a will register in Electrical Engineering 3 and 22.

[4]A limited number of students may elect Highway Bridges and Culverts (3 hrs.) instead.

[5]A limited number of students may elect Highway Engineering (2 hrs.) instead.

*Only students having high grades may elect a thesis. Others must offer an acceptable substitute.

SECOND YEAR FOR THE CLASS OF 1918

. E. 27—Plane Surveying	3	C. E. 28—Higher Surveying	3
Math. 7—Differential Calculus	5	Math. 9—Integral Calculus	3
Phys. 1a—Physics Lecture	3	Phys. 1b—Physics Lecture	2
Phys. 3a—Physics Laboratory	2	Phys. 3b—Physics Laboratory	2
Chet. 1—Rhetoric and Themes	3	Rhet. 2—Rhetoric and Themes	3
Mil. 2c—Military Drill	1	T. & A. M. 20—Analytic Mechanics	3
Elective	2	Mil. 2d—Military Drill	1
		Elective	2
Total	19	Total	19

THIRD YEAR FOR THE CLASS OF 1917

. E. 51—Railroad Surveying	5	C. E. 52—Roads and Pavements	2
M. E. 1—Steam Engines and Boilers	3	C. E. 60—Structural Stresses	4
. & A. M. 21—Analytic Mechanics	2	C. E. 62—Structural Details	2
. & A. M. 29—Resistance of Materials	5	C. E. 70—Seminar	1
on-technical elective	3	T. & A. M. 10—Hydraulics	3
		Non-technical elective	3
Total	18	Total	16

FOURTH YEAR FOR THE CLASS OF 1916

I. General Civil Engineering Option

. E. 77—Masonry Construction	4	C. E. 80—Contracts and Specifications	2
. E. 79—Cement Laboratory	1	E. E. 4—Elementary Electrical Engineering	2
. E. 81—Theory of Reinforced Concrete	3	E. E. 64—Electrical Engineering Laboratory	1
. E. 83—Bridge Design	3	M. & S. E. 3—Sewerage	3
spection Trip		Non-technical elective	3
. & S. E. 2—Water Supply Engineering	4	Technical elective	5
echnical elective	2		
Total	16	Total	16

II. Structural Engineering Option

E. 77—Masonry Construction	4	C. E. 80—Contracts and Specifications	2
E. 79—Cement Laboratory	1	C. E. 82—Concrete Design, or	
. E. 81—Theory of Reinforced Concrete	2	C. E. 84—Concrete Buildings	4
E. 85—Steel Bridge Design	5	C. E. 88—Steel Building Design	4
E. 87—Advanced Bridge Analysis.	2	M. & S. E. 3—Sewerage	3
spection Trip		Non-technical elective	3
. & S. E. 2—Water Supply Engineering	4 (2?)	Total	16
Total	18(16?)		

III. Highway Engineering Option

E. 77—Masonry Construction	4	C. E. 80—Contracts and Specifications	2
E. 79—Cement Laboratory	1	C. E. 92—Concrete Bridges and Culverts	2
E. 81—Theory of Reinforced Concrete	2	C. E. 94—Highway Administration	3
E. 91—Highway Bridge Design	4	C. E. 96—Road Laboratory	2
E. 93—Road Construction	3	Chem. 73—Asphalt, Tar, etc.	2
spection Trip		Non-technical elective	3
. & S. E. 2—Water Supply Engineering	4 (2?)	Technical elective	2
Total	18(16?)	Total	16

Technical Electives[1]

C. E. 83—Bridge Design	3
C. E. 85—Steel Bridge Design	5
C. E. 87—Advanced Bridge Analysis	2
C. E. 91—Highway Bidge Design	4
C. E. 93—Road Construction	3
C. E. 99—Thesis[2]	1
Min. 6a—M. E. of Mines	3
R. E. 33—Economy of Railway Location	4
C. E. 76—General Surveying	
C. E. 82—Concrete Design	
C. E. 84—Concrete Buildings	
C. E. 88—Steel Building Design	
C. E. 92—Highway Bridge Design	
C. E. 94—Highway Administration	
C. E. 96—Road Laboratory	
C. E. 98—Office Building Design	
C. E. 100—Thesis[2]	2 or
Chem. 73—Asphalts, Tar, etc	
E. E. 4—Electrical Engineering	
E. E. 64—Electrical Engineering Laboratory	
Min. 1—Earth and Rock Excavation	
M. & S. E. 9—Hydraulic Design and Construction	
M. & S. E. 3—Sewerage	
R. E. 31—Railway Yards and Terminals	

Course in Electrical Engineering as Taught in 1914-15

FIRST YEAR

FIRST SEMESTER	S. H.[3]	SECOND SEMESTER	S. H
G. E. D. 1[4]—General Engineering Drawing	4	G. E. D. 2[4]—Descriptive Geometry	
Math. 2—Algebra	3	Math. 6—Analytic Geometry	
Math. 4—Trigonometry	2	M. E. 79 or 75 & 77 (41)—Shop Practise	
M. E. 75 & 77 or 79 (41)—Shop Practise	3	Rhet. 2—Rhetoric and Themes	
Rhet. 1—Rhetoric and Themes	3	Mil. 1—Drill Regulations	
Mil. 2a—Military Drill	1	Mil. 2b—Military Drill	
P. T. 1—Gymnasium	1	P. T. 2—Gymnasium	
Total	17	Total	

SECOND YEAR

Math. 7—Differential Calculus	5	Chem. 1—Inorganic Chemistry	
M. E. 81 (42)—Machine Work	3	Math. 9—Integral Calculus	
Phys. 1a—Physics Lectures	3	Phys. 1b—Physics Lectures	
Phys. 3a—Physics Laboratory	2	Phys. 3b—Physics Laboratory	
Rhet. 1—Rhetoric and Themes	3	Rhet. 2—Rhetoric and Themes	
Mil. 2c—Military Drill	1	T. A. M. 20 (7)—Analytic Mechanics	
		Mil. 2d—Military Drill	
Total	17	Total	

THIRD YEAR

Chem. 4—Advanced Chemistry	4	E. E. 26 (5)—Alternating Currents	
E. E. 25 (3)—Direct Current Apparatus	4	E. E. 76 (23)—Elec. Eng. Laboratory	
E. E. 75 (22)—Elec. Eng. Laboratory	2	M. E. 2—Steam Engineering	
Math. 9a—Integral Calculus	2	Phys. 4b—Elec. & Mag. Measurement	
Phys. 4a—Elec. & Mag. Measurement	2	T. A. M. 26—Analytic Mechanics and Hydraulics	
T. A. M. 25—Resistance of Materials	4		
Total	18	Total	

FOURTH YEAR

E. E. 95 (13)—Seminar	1	E. E. 96 (13)—Seminar	
E. E. 14—Alternating Current Apparatus	4	E. E. 17—Alternating Current Apparatus	
E. E. 24—Elec. Eng. Laboratory	2	E. E. 27—Elec. Eng. Laboratory	
E. E. 55 (32)—Electrical Design	2	E. E. 56 (34)—Electrical Design	
M. E. 15—Thermodynamics[2]	5	E. E. 99 (35)—Thesis, or elective	
Non-technical elective	3	Non-technical elective	
Total	17	Total	

[1]Subjects in this list which are not required in the option chosen may be used technical electives.

[2]Only students having high grades may elect a thesis.

[3]Semester hours. For definition, see page 263.

[4]The numbers refer to courses in the Description of Courses, page 261. Numbers parenthesis are old numbers.

Course in Electrical Engineering as Taught in 1915-16

FIRST YEAR FOR THE CLASS OF 1919

FIRST SEMESTER	S. H.[1]	SECOND SEMESTER	S. H.[1]
hem. 1[2]—Inorganic Chemistry	4	Chem. 4[2]—Advanced Chemistry	4
. E. D. 1—Gen. Eng. Drawing	4	G. E. D. 2—Descriptive Geometry	4
lath. 2—Algebra	3	Math. 6—Analytic Geometry	5
lath. 4—Trigonometry	2	Rhet. 2 (1)—Rhetoric and Themes	3
het. 1—Rhetoric and Themes	3	Mil. 1—Drill Regulations	1
il. 2a—Military Drill	1	Mil.2b—Military Drill	1
. T. 1—Gymnasium	1	P. T. 2 (1)—Gymnasium	1
Total	18	Total	19

Summer Reading, 50 points

SECOND YEAR FOR THE CLASS OF 1918

anguage	4	Language	4
lath. 7—Differential Calculus	5	Chem. 1—Inorganic Chemistry	4
. E. 81 (42)—Machine Work	3	Math. 9—Integral Calculus	3
hys. 1a—Physics Lectures	3	Phys. 1b—Physics Lectures	2
hys. 3a—Physics Laboratory	2	Phys. 3b—Physics Laboratory	2
il. 2c—Military Drill	1	T. A M. 20 (7)—Analytic Mechanics	3
		Mil. 2d—Military Drill	1
Total	18	Total	19

Summer Reading, 50 points

THIRD YEAR FOR THE CLASS OF 1917

hem. 4—Advanced Chemistry	4	E. E. 26 (5)—Elementary Alternating Currents	4
. E. 25 (3)—Direct Current Apparatus	4	E. E. 76 (23)—Elec. Eng. Laboratory	2
. E. 75 (22)—Elec. Eng. Laboratory	2	M. E. 2—Steam Engineering	3
hys. 4a—Elec. & Mag. Measurement	2	Phys. 4b—Elec. & Mag. Measurement	2
ath. 9a—Integral Calculus	2	T. A. M. 26—Anal. Mech. & Hydr	4
. A. M. 25—Resistance of Materials	4	Elective	3
Total	18	Total	18

FOURTH YEAR FOR THE CLASS OF 1916

E. 95 (13)—Seminar	1	E. E. 96 (13)—Seminar	1
E. 14—Alternating Current Apparatus	4	E. E. 17—Alternating Current Apparatus	4
E. 24—Elec. Eng. Laboratory	2	E. E. 27—Elec. Eng. Laboratory	2
E. 55 (32)—Electrical Design	2	E. E. 56 (34)—Electrical Design	4
spection Trip		E. E. 99 (35)—Thesis, or elective	3
. E. 61—Power Measurement	3	Elective	3
. E. 11—Thermodynamics	3		
ective	3	Total	17
Total	18		

Course in Mechanical Engineering as Taught in 1914-15

FIRST YEAR

FIRST SEMESTER	S. H.[1]	SECOND SEMESTER	S. H.[1]
hem. (1)[2]—Inorganic Chemistry	4	Chem. (4)[2]—Advanced Chemistry	4
. E. D. (1)—Gen. Eng. Drawing	4	G. E. D. (2)—Descriptive Geometry	4
nguage	4	Language	4
ath. (2)—Algebra	3	Math. (6)—Analytic Geometry	5
ath. (4)—Trigonometry	2	Mil. (1)—Drill Regulations	1
il. 2a (2)—Military Drill	1	Mil. 2b (2)—Military Drill	1
T. (1)—Gymnasium	1	P. T. 2 (1)—Gymnasium	1
Total	19	Total	20

[1]Semester hours. For definition, see page 263.

[2]The numbers refer to courses in the Description of Courses, page 261. Numbers in renthesis are old numbers.

SECOND YEAR

Math. (7)—Differential Calculus	5	Math. (9)—Integral Calculus	3
M. E. S1 (42)—Machine Shop	3	M. E. 82 (42)—Machine Shop	2
M. E. (4)—Machine Design	2	M. E. 2 (16)—Steam Engineering	3
Physics 1a (1)—Physics Lectures	3	Phys. 1b (1)—Physics Lectures	2
Phys. 3a (3)—Physics Laboratory	2	Phys. 3b (3)—Physics Laboratory	2
Rhet. (1)—Rhetoric and Themes	3	Rhet. 2 (1)—Rhetoric and Themes	3
Mil. 2c (2)—Militay Drill	1	T. A. M. 20 (7)—Analytic Mechanics	3
		Mil. 2d (2)—Military Drill	1
Total	19	Total	19

THIRD YEAR

Chem. (1)—Inorganic Chemistry	4	Chem. 16 (16)—Engineering Chemistry	3
Math. (9a)—Integral Calculus	2	M. E. 64 (3)—Power Measurement	3
T. & A. M. 27 (8)—Analytic Mechanics	3	M. E. 12 (7)—Thermodynamics	5
T. & A. M. 29 (9)—Resistance of Materials	5	M. E. (30)—Mechanics of Machinery	5
Non-technical elective	3		
Total	17	Total	16

FOURTH YEAR

Econ. (2)—Principles of Economics	2	Econ. 16 (16)—Economic Problems	2
E. E. 12 (6)—Alternating Currents	2	E. E. 29 (29)—Alt. Cur. Lab. or C. E. 76 Surveying	2
M. E. 6a (6)—Heat Engines	3	M. E. 66 (6)—Heat Engines	2
M. E. (8)—Mechanics of Machinery	3	M. E. 52 (14)—Design of Power Plants	3
M. E. (9)—Machinery Design	3	M. E. 26 (38)—Heat. and Vent.	3
M. E. 65 (12)—Mechanics Laboratory	3	M. E. 99 (33)—Thesis or elective	3
M. E. 19 (19)—Seminar	1		
Total	17	Total	15

Course in Mechanical Engineering as Taught in 1915-16

FIRST YEAR FOR THE CLASS OF 1919

FIRST SEMESTER	S. H.[1]	SECOND SEMESTER	S. H.[1]
Chem. 1a[2] or 1b—Inorganic Chemistry	4	Chem. 4—Qualitative Analysis	4
G. E. D. 1—Gen. Eng. Drawing	4	G. E. D. 2—Descriptive Geometry	4
Rhet. 1—Rhetoric and Themes	3	Rhet. 2 (1)—Rhetoric and Themes	4
Math. 2—College Algebra	3	Math. 6—Analytical Geometry	5
Math. 4—Trigonometry	2	Mil. 1—Drill Regulations	1
Mil. 2a (2)—Military Drill	1	Mil. 2b (2)—Military Drill	1
P. T. 1—Gymnasium	1	P. T. 2 (1)—Gymnasium	1
Total	19	Total	20

Summer Reading, 50 points

SECOND YEAR FOR THE CLASS OF 1918

Math. 7—Differential Calculus	5	Math. 9—Integral Calculus	3
M. E.—Shop Work	3	M. E.—Shop Work	3
Phys. 1a—Physics Lectures	3	Phys. 1b—Physics Lectures	2
Phys. 3a—Physics Laboratory	2	Phys. 3b—Physics Laboratory	2
Rhet. 1—Rhetoric and Themes	3	Rhet. 2—Rhetoric and Themes	3
Mil. 2c (2)—Military Drill	1	Mil. 2d (2)—Military Drill	1
		T. & A. M. 20 (7)—Analytic Mechanics	3
Total	17	Total	17

Summer Reading, 50 points

THIRD YEAR FOR THE CLASS OF 1917

Chem. 1a or 1b—Inorganic Chemistry	4	Chem. 16—Engineering Chemistry	3
Elective	3	M. E. 64 (3)—Power Measurement	3
Math. 9a—Differential Equations	2	M. E. 12 (7)—Thermodynamics	5
T. & A. M. 27 (8)—Analytic Mechanics	3	M. E. 30—Mechanics of Machinery	5
T. & A. M. 29 (9)—Resistance of Materials	5		
Total	17	Total	16

[1]Semester hours. For definition, see page 263.

[2]The numbers refer to courses in the Description of Courses, page 261. Numbers in parenthesis are old numbers.

FOURTH YEAR FOR THE CLASS OF 1916

E. E. 11 (16)—Direct Current Apparatus.	3	E. E. 12 (6 & 29)—Alternating Current Apparatus	3
E. E. 61—Direct Current Laboratory	1	E. E. 62—Alt. Current Laboratory	1
M. E. 43 (9)—Engineering Design	5	M. E. 32—Power Transmission	3
M. E. 65 (12)—Power Laboratory	3	M. E. 26 (38)—Heating and Ventilation	2
M. E. 37 (39)—Science of Management or		M. E. 44—Engineering Design or	5
M. E. 15 (6)—Gas Power Engineering	3	M. E. 52 (14)—Power Plant Design	3
Elective	3	M. E. 66 (27)—Power Laboratory	2
Inspection Trip			
Total	18	Total	15

Course in Mining Engineering as Taught in 1914-15

FIRST YEAR

FIRST SEMESTER	S. H.[1]	SECOND SEMESTER	S. H.[1]
Chem. 1[2]—Inorganic Chemistry	4	Chem. 2[2]—Inorganic Chemistry	2
G. E. D. 1—General Engineering Drawing	4	Chem. 3—Qualitative Analysis	2
Math. 2—Advanced Algebra	3	G. E. D. 2—Descriptive Geometry	4
Math. 4—Trigonometry	2	Math. 6—Analytical Geometry	5
Rhet. 1—Rhetoric and Themes	3	Rhet. 2—Rhetoric and Themes	3
Mil. 2a—Drill	1	Mil. 1—Drill Regulations	1
Phys. Train. 1—Gymnasium	1	Mil. 2b—Drill	1
		Phys. Train. 2—Gymnasium	1
Total	18	Total	19

SECOND YEAR

Chem. 1b or 1a—Inorganic Chemistry	4	Chem. 2—Inorganic Chemistry	2
Math. 7—Differential Calculus	5	Chem. 3—Qualitative Analysis	3
Mining Eng. 1—Earth and Rock Excav	1	Math. 9—Integral Calculus	3
Physics 1a—Physics Lectures	3	Physics 1b—Physics Lectures	2
Physics 3a—Physics Laboratory	2	Physics 3b—Physics Laboratory	2
Rhet. 1—Rhetoric and Themes	3	Rhet. 2—Rhetoric and Themes	3
Mil. 2c—Drill	1	T. & A. M. 20—Analytical Mechanics	3
		Mil. 2d—Drill	1
Total	19	Total	19

THIRD YEAR

Chem. 5a—Elementary Quantitative Analysis	4	C. E. 58—Graphic Statics	2
C. E. 27—Surveying	3	E. E. 4—Electrical Engineering	2
M. E. 1—Steam Engineering	3	E. E. 64—Electrical Eng. Lab	1
Geol. 13a—Engineering Geology	3	Min. Eng. 6—Mech. Eng. of Mines	2
T. & A. M. 25 (25)—Resistance of Materials	4	Geol. 13b—Engineering Geology	3
		Min. Eng. 3—Mining Methods	2
		T. & A. M. 26 (26)—Kinetics and Hydraulics	4
Total	17	Total	16

FOURTH YEAR

Chem. 7—Metallurgy	3	E. E. 4—Electrical Engineering	2
Chem. 65—Gas and Fuel Analysis	2	E. E. 64—Elect. Eng. Lab	1
Chem 69—Assaying, or Geol. 21—Geology of Coal	2	Geol. 2—Economic Geology	3
Mining Eng. 6a—Mechanical Engineering of Mines	3	Mining Eng. 42—Mine Plant	2
Mining Eng. 9—Preparation of Coal and Ores	3	Mining Eng. 8—Mine Administration	2
Mining Eng. 41—Mine Design	3	Mining Eng. 64—Mining Laboratory	3
		Mining Eng. 100 (or approved Elective)	3
Total	16	Total	16

[1]Semester hours. For definition, see page 263.
[2]The numbers refer to courses in the Description of Courses, page 261.

Course in Mining Engineering as Taught in 1915-16

FIRST YEAR FOR THE CLASS OF 1919

FIRST SEMESTER	S. H.[1]	SECOND SEMESTER	S. H.[1]
Chem. 1a[2] or 1b—Inorganic Chemistry	4	Chem. 2 & 3—Inorganic Chemistry and Qualitative Analysis	4
G. E. D. 1—General Engineering Drawing	4	G. E. D. 2—Descriptive Geometry	4
Math. 2—Adv. Algebra	3	Math. 6—Analytical Geometry	5
Math. 4—Trigonometry	2	Rhet. 2—Rhetoric and Themes	3
Rhet. 1 (1)—Rhetoric and Themes	3	Mil. 2b (2)—Military Drill	1
Mil. 2a (2)—Military Drill	1	Mil. 1—Drill Regulations	1
P. T. 1—Gymnasium	1		
Total	18	Total	18

Summer Reading, 50 points

SECOND YEAR FOR THE CLASS OF 1918

Geol. 13a—Engineering Geology	3	Geol. 13b—Engineering Geology	3
Language	4	Language	4
Math. 7—Differential Calculus	5	Math. 9—Integral Calculus	3
Phys. 1a—Physics Lecture	3	Phys. 1b—Physics Lecture	2
Phys. 3a—Physics Laboratory	2	Phys. 3b—Physics Laboratory	2
Mil. 2c (2)—Drill	1	T. & A. M. 20 (7)—Analytic Mechanics	3
		Mil. 2d (2)—Drill	1
Total	18	Total	18

Summer Reading, 50 points

THIRD YEAR FOR THE CLASS OF 1917

Chem. 5a—Quantitative Analysis	4	C. E. 58 (20)—Graphic Statics	2
C. E. 27 (21)—Surveying	3	E. E. 4—Elementary Electrical Engineering and	2
Geol. 13a—Engineering Geology	3	E. E. 64—Elect. Eng. Lab	1
M. E. 1—Steam Engineering	3	Geol. 13b—Engineering Geology	3
T. & A. M. 25—Resistance of Material	4	Min. 4—Mining Methods	2
		Min. 6—Mechanical Engineering of Mines	2
Total	17	T. & A. M. 26—Analytic Mechanics and Hydraulics	4
		Total	16

FOURTH YEAR FOR THE CLASS OF 1916

Chem. 7—Metallurgy	3	Elective	3
Chem. 65—Gas and Fuel Analysis	2	Min. 62 (4)—Mine Surveying	4
Chem. 69—Assaying	2	Min. 8 (7)—Mine Administration and Law	3
Elective	3	Min. 42 (8)—Mine Plants	2
Min. 5—Ventilation	2	Min. 64 (10)—Mining Laboratory	3
Min. 9—Preparation of Coal and Ores	3	Min. 13—Utilization of Fuels	2
Min. 41 (12)—Mine Design	3		
Inspection Trip		Total	17
Total	18		

Course in Municipal and Sanitary Engineering as Taught in 1914-15

FIRST YEAR

FIRST SEMESTER	S. H.[1]	SECOND SEMESTER	S. H.[1]
Chem. 1[2]—Inorganic Chemistry	4	Chem. 2, 3[2]—Inorganic and Analytic	4
G. E. D. 1—Drawing	4	G. E. D. 2—Descriptive Geometry	4
Language	4	Language	4
Math. 2—Advanced Algebra	3	Math. 6—Analytic Geometry	5
Math. 4—Trigonometry	2	Mil. 1—Drill Regulations	1
Mil. 2a—Drill	1	Mil. 2b—Drill	1
P. T. 1—Gymnasium	1	P. T. 2—Gymnasium	1
Total	19	Total	20

[1]Semester hours. For definition, see page 263.
[2]The numbers refer to courses in the Description of Courses, page 261. Numbers in parenthesis are old numbers.

SECOND YEAR

C. E. 27—Surveying	3	C. E. 28—Surveying	3
Math. 7—Differential Calculus	5	Math. 9—Integral Calculus	3
Physics 1a—Physics Lectures	3	Physics 1b—Physics Lectures	2
Physics 3a—Physics Laboratory	2	Physics 3b—Physics Laboratory	2
Rhet. 1—Rhetoric and Themes	3	Rhet. 2—Rhetoric and Themes	3
Mil. 2c—Drill	1	T. A. M. 20—Analytic Mechanics	3
		Mil. 2d—Drill	1
Total	17	Total	17

THIRD YEAR

Chem. 1b or 1a—Inorganic Chemistry	4	Chem. 2, 3 10b—Qualitative and Water Analysis	5
C. E. 53—R. R. Surveying	3	C. E. 60—Structural Stresses	4
Botany 6	2	C. E. 62—Structural Details	2
T. & A. M. 21—Analytic Mechanics	2	M. E. 23—Steam Engineering	2
T. & A. M. 25—Resistance of Material	5	T. & A. M. 10—Hydraulics	3
Total	16	Total	17

FOURTH YEAR

M. & S. E. 2—Water Supply Engineering	4	M. & S. E. 3—Sewerage	3
M. & S. E. 6a—Water Purification	3	M. & S. E. 6b—Water Purification	2
C. E. 77—Masonry	4	M. & S. E. 9—Hyd. Des. & Const.	2
C. E. 79—Cement Laboratory	1	M. & S. E. 30—Thesis	2
C. E. 12—Bridge Analysis	2	C. E. 6b—Masonry and Reinforced Concrete	2
C. E. 13—Bridge Details	2	M. E. 61—Mechanical Engineering Laboratory	2
E. E. 64—Electrical Engineering	1	Econ. 2—Principles of Economy	2
Total	17	Total	17

Course in Municipal and Sanitary Engineering as Taught in 1915-16

FIRST YEAR FOR THE CLASS OF 1919

	S. H.[1]		S. H.[1]
Chem. 1a[2] or 1b—Inorganic Chemistry	4	Chem. 4—Advanced Chemistry	4
G. E. D. 1—General Engineering Drawing	4	G. E. D. 2—Discriptive Geometry	4
Math. 2—Advanced Algebra	3	Math. 6—Analytic Geometry	5
Math. 4—Trigonometry	2	Rhet. 1b—Rhetoric and Themes	3
Rhet. 1a—Rhetoric and Themes	3	Mil. 1—Drill Regulations	1
Mil. 2a (2)—Military Drill	1	Mil. 2b (2)—Military Drill	1
P. T. 1a (1)—Gymnasium	1	P. T. 1b (1)—Gymnasium	1
Total	18	Total	19

Summer Reading, 50 points.

SECOND YEAR FOR THE CLASS OF 1918

C. E. 27—Plane Surveying	3	C. E. 28—Higher Surveying	3
Math. 7—Differential Calculus	5	Math. 9—Integral Calculus	3
Phy. 1a (1)—Physics Lectures	3	Phy. 1b (1)—Physics Lectures	2
Phy. 3a (3)—Physics Laboratory	2	Phy. 3b (3)—Physics Laboratory	2
Rhet. 1—Rhetoric and Themes	3	Rhet. 1—Rhetoric and Themes	3
Mil. 2c (2)—Military Drill	1	T. & A. M. 21 (7)—Analytic Mechanics	3
		Mil. 2d (2)—Military Drill	1
Total	17	Total	17

Summer Reading, 50 points.

THIRD YEAR FOR THE CLASS OF 1917

Chem. 1b or 1a—Inorganic Chemistry	4	Chem. 2, 3, 10b—Qualitative and Water Analysis	5
C. E. 4a—Railroad Surveying	3	C. E. 60—Structural Stresses	4
Botany 6—Bacteriology	2	C. E. 52—Roads and Pavements	3
T. & A. M. 21—Analytic Mechanics	2	M. E. 2—Steam Engineering	3
T. & A. M. 20—Resistance of Material	5	T. & A. M. 10—Hydraulics	3
Total	16	Total	18

[1]Semester hours. For definition, see page 263.

[2]The numbers refer to courses in the Description of Courses, page 261. Numbers in parenthesis are old numbers.

FOURTH YEAR FOR THE CLASS OF 1916

C. E. 77 (5r)—Masonry	4
C. E. 79 (5r)—Cement Laboratory	1
C. E. 81 (6a)—Reinforced Concrete	2
M. E. 61 (13)—Steam Laboratory	2
M. & S. E. 2—Water Supply Engineering	4
M. & S. E. 6a—Water Purification and Sewage Disposal	3
Non-technical Elective	2
Inspection Trip	
Total	18

C. E. 62—Structural Details	2
C. E. 80 (16)—Contracts and Specifications	2
E. E. 4 (1)—Elementary Electrical Engineering	2
E. E. 64 (28)—Electrical Engineering Laboratory	1
M. & S. E. 3—Sewerage	3
M. & S. E. 6b—Water Purification and Sewage Disposal	2
M. & S. E. 9—Hydraulic Design and Construction	2
M. & S. E. 30—Thesis or Applied Electricity	3
Total	17

Course in Railway Civil Engineering as Taught in 1914-15

FIRST YEAR

FIRST SEMESTER

	S. H.[1]
G. E. D. (1)[2]—General Engineering Drawing	4
Chemistry (1a or 1b)—Inorg. Chemistry	4
Math. (4)—Trigonometry	2
Math. (2)—Advanced Algebra	3
Rhet. (1)—Rhetoric and Themes	3
Mil. 2a (2)—Military Drill	1
P. T. (1)—Gymnasium	1
Total	18

SECOND SEMESTER

	S. H.[1]
G. E. D. (2)[2]—Descriptive Geometry	4
Chemistry (4)—Qual. Analysis	4
Math. (6)—Analytic Geometry	5
Rhet. 2 (1)—Rhetoric and Themes	3
Mil. 2b (2)—Military Drill	1
Mil. (1)—Drill Regulations	1
P. T. 2 (1)—Gymnasium	1
Total	19

SECOND YEAR

Chemistry	4
C. E. 27 (21)—Surveying	3
Math. (7)—Differential Calculus	5
Phys. 1a (1)—Physics Lectures	3
Phys. 3a (3)—Physics Laboratory	2
Mil. 2c (2)—Military Drill	1
Total	18

Chemistry	4
C. E. 28 (22)—Topographical Surveying	3
Math. (9)—Integral Calculus	3
Phys. 1b (1)—Physics Lectures	2
Phys. 3b (3)—Physics Laboratory	2
T. & A. M. 20 (7)—Analytic Mechanics	3
Mil. 2d (2)—Military Drill	1
Total	18

THIRD YEAR

Chemistry (1a or 1b)—Inorg. Chemistry	4
C. E. 51 (4)—R. R. Surveying	5
R. E. 25—Ry. Development	3
T. & A. M. 21 (8)—Analytic Mechanics	2
T. & A. M. 29 (9)—Resistance of Materials	5
Total	19

C. E. 60 (12)—Bridge Analysis	2
C. E. 60 (20)—Graphic Statics	2
R. E. (31)—Railway Yards and Terminals	3
R. E. 34—Railway Maintenance	4
T. & A. M. (10)—Hydraulics	3
Non-technical Elective	3
Total	17

FOURTH YEAR

C. E. 77, 79 (5)—Masonry Construction	5
C. E. (12)—Bridge Analysis	2
C. E. 81, 6—Reinforced Concrete Theory	1
C. E. (24)—Metal Structures	1
Econ. (41)—Railway History and Organization	3
R. E. (33)—Ry. Location	4
R. E. (35)—Ry. Signaling	1
R. E. (50)—Seminar	1
Total	18

C. E. 6b (6)—Masonry Design	2
C. E. 83 (14a)—Bridge Design	2
C. E. 80 (16)—Engineering Construction and Specifications	2
Econ. (42)—Railway Administration	3
R. E. (30)—Thesis	3
R. E. (32)—Railway Construction	2
R. E. 51 (50)—Seminar	1
Total	15

[1]Semester hours. For definition, see page 263.

[2]The numbers refer to courses in the Description of Courses, page 261. Numbers in parenthesis are old numbers.

Course in Railway Civil Engineering as Taught in 1915-16

FIRST YEAR FOR THE CLASS OF 1919

	S. H.[1]
Chem. (1a or 1b)[2]	4
G. E. D. (1)	4
Math. (2)—Advanced Algebra	3
Math. (4)—Trigonometry	2
Rhet. (1)—Rhetoric and Themes	3
Mil. 2a (2)—Military Drill	1
P. T. 1 (1)—Gymnasium	1
Total	18

	S. H.[1]
Chem. (1)[2]—Qualitative Analysis	4
G. E. D. (2)—Descriptive Geometry	4
Math. (6)—Analytic Geometry	5
Rhet. 2 (1)—Rhetoric and Themes	3
Mil. (1)—Military Drill	1
Mil. 2b (2)—Drill Regulations	1
P. T. 2 (1)—Gymnasium	1
Total	19

Summer Reading, 50 points.

SECOND YEAR FOR THE CLASS OF 1918

C. E. 27 (21)—Surveying	3
Language	4
Math. (7)—Differential Calculus	5
Phys. 1a (1)—Physics Lectures	3
Phys. 3a (3)—Physics Laboratory	2
Mil. 2c (2)	1
Total	18

C. E. 28 (22)—Topographical Surveying	3
*Language	4
Math. (9)—Integral Calculus	3
Phys. 1b (1)—Physics Lectures	2
Phys. 3b (3)—Physics Laboratory	2
T. & A. M. 20 (7)—Analytic Mechanics	3
Mil. 2d (2)	1
Total	18

Summer Reading, 50 points

THIRD YEAR FOR THE CLASS OF 1917

C. E. 51 (4)—Railroad Surveying	5
R. E. 25—Railway Development	3
Rhet. (1)—Rhetoric and Themes	3
T. & A. M. 21 (8)—Analytic Mechanics	2
T. & A. M. 29 (9)—Resistance of Materials	5
Total	18

C. E. 60 (12, 20)—Structural Stresses	4
R. E. (31)—Railway Yards and Terminals	3
R. E. 34—Ry. Maintenance	4
Rhet. 2 (1)—Rhetoric and Themes	3
T. & A. M. (10)—Hydraulics	3
Total	17

FOURTH YEAR FOR THE CLASS OF 1916

C. E. 77 (5r)—Masonry Construction	4
C. E. 79 (51)—Cement Laboratory	1
C. E. 91 (6)—Reinforced Concrete Theory	2
C. E. 83 (14a)—Bridge Design	3
M. E. (11)—Steam Engines and Boilers	3
R. E. (32)—Railway Construction	3
R. E. (35)—Railway Signaling	1
R. E. (50)—Seminar	1
Total	18

C. E. 80 (16)—Engineering Construction and Specifications	2
E. E. 4—Elementary Elec. Eng	3
E. E 64—Electrical Eng. Laboratory	1
Non-technical Elective	3
R. E. (30)—Thesis	3
R. E. (33)—Railway Location	5
R. E. 51 (50)—Seminar	1
Total	17

Course in Railway Electrical Engineering as Taught in 1914-15

FIRST YEAR

FIRST SEMESTER

	S. H.[1]
Chem. (1)[2]—Inorganic Chemistry	4
G. E. D. (1)—General Engineering Drawing	4
Math. (2)—Advanced Algebra	3
Math. (4)—Trigonometry	2
Rhet. (1)—Rhetoric and Themes	3
Mil. 2a (2)—Military Drill	1
P. T. (1)—Gymnasium	1
Total	18

SECOND SEMESTER

	S. H.[1]
Chem. (2 and 3)[2]—Inorganic Chemistry and Analysis	4
G. E. D. (2)—Descriptive Geometry	4
Math. (6)—Analytic Geometry	5
Rhet. 2 (1)—Rhetoric and Themes	3
Mil. (1)—Drill Regulations	1
Mil. 2b (2)—Military Drill	1
P. T. 2 (1)—Gymnasium	1
Total	19

SECOND YEAR

Math. (7)—Differential Calculus	5
M. E. 81 (42)—Shop Practise	3
Phys. 1a (1)—Physics Lectures	3
Phys. 3a (3)—Physics Laboratory	2
Rhet. (1)—Rhetoric and Themes	3
Mil. 2c (2)—Military Drill	1
Total	17

Chem. (1)—Inorganic Chemistry	4
Math. (9)—Integral Calculus	3
Phys 1b (1)—Physics Lectures	2
Phys. 3b (3)—Physics Laboratory	2
Rhet. 2 (1)—Rhetoric and Themes	3
T. & A. M. 20 (7)—Analytic Mechanics	3
Mil. 2d (2)—Military Drill	1
Total	18

[1]Semester hours. For definition, see page 263.

[2]The numbers refer to courses in the Description of Courses, page 261. Numbers in parenthesis are old numbers.

THIRD YEAR

FIRST SEMESTER		SECOND SEMESTER	
Chem. (2 and 3)—Inorganic Chemistry and Analysis	4	E. E. 26 (5)—Alternating Currents	4
E. E. 25 (3)—Dynamo Electrical Mach.	4	E. E. 76 (23)—Electrical Engineering Laboratory	2
E. E. 75 (22)—Electrical Engineering Laboratory	2	M. E. 2—Steam Engines	3
Phys. 4a (4)—Electrical and Magnetic Measurements	2	Phys. 4b (4)—Electrical and Magnetic Measurements	2
R. E. 25—Railway Development	3	R. E. 60—Electric Railway Principles	2
T. & A. M. 25 (9)—Resistance of Materials	4	T. & A. M. 36 (8)—Analytic Mechanics	2
		Non-technical Elective	3
Total	19	Total	18

FOURTH YEAR

Econ. (2)—Principles of Economics	2	Econ. (16)—Economic Problems	2
E. E. (14)—Advanced Alternating Currents	4	E. E. 56 (34)—Electric Design and Power Plants	4
E. E. (24)—Electrical Engineering Laboratory	2	R. E. 68 (10)—Seminar	1
M. E. (15)—Thermodynamics	3	R. E. (30)—Thesis or Option	3
M. E. (23)—Steam Engines	2	R. E. (63)—Electric Railway Laboratory	3
R. E. 67 (10)—Seminar	1	R. E. (65)—Electric Railway Practise	3
R. E. (64)—Electric Railway Practise	3		
Total	17	Total	16

Course in Railway Electrical Engineering as Taught in 1915-16

FIRST YEAR FOR THE CLASS OF 1919

FIRST SEMESTER	S. H.[1]	SECOND SEMESTER	S. H.[1]
Chem. 1a[2] or 1b (1)—Inorganic Chemistry	4	Chem. 4 (4)—Qualitative Analysis	4
G. E. D. 1 (1)—General Engineering Drawing	4	G. E. D. 2 (2)—Descriptive Geometry	4
Math. 2 (2)—College Algebra	3	Math. 6 (6)—Analytic Geometry	5
Math. 4 (4)—Plane Trigonometry	2	Rhet. 2 (1)—Rhetoric and Themes	3
Rhet. 1 (1)—Rhetoric and Themes	3	Mil. 1 (1)—Drill Regulations	1
Mil. 2a (2)—Military Drill	1	Mil. 2b (2)—Military Drill	1
P. T. 1 (1)—Gymnasium	1	P. T. 2 (1)—Gymnasium	1
Total	18	Total	18

Summer Reading, 50 points

SECOND YEAR FOR THE CLASS OF 1918

Language	4	Language	4
Math. 7 (7)—Differential Calculus	5	Math. 9 (9)—Integral Calculus	3
M. E. 75 (41)—Forge Work	1	M. E. 79 (41)—Pattern Work	3
M. E. 77 (41)—Foundry Work	2	Phys. 1b (1)—General Physics	2
Phys. 1a (1)—General Physics	4	Phys. 3b (3)—Physical Measurements	2
Phys. 3a (3)—Physical Measurements	2	T. & A. M. 20 (7)—Analytic Mechanics	3
Mil. 2c (2)—Military Drill	1	Mil. 2d (2)—Military Drill	1
Total	19	Total	18

Summer Reading, 50 points

THIRD YEAR FOR THE CLASS OF 1917

Chem. 4 (4)—Qualitative Analysis	4	E. E. 26 (5)—Alternating Currents	4
E. E. 25 (3)—D. C. Apparatus	4	E. E. 76 (23)—Electrical Laboratory	2
E. E. 75 (22)—Electrical Laboratory	2	Elective	3
Phys. 4a (4)—Electrical and Magnetic Measurements	2	M. E. 2—Steam Engineering	3
R. E. 25—Railway Development	3	Phys. 4b (4)—Electrical and Magnetic Measurements	2
T. & A. M. 25 (9)—Resistance of Materials	4	R. E. 60—Electric Railway Principles	2
		T. & A. M. 36 (8)—Analytic Mechanics	2
Total	19	Total	18

FOURTH YEAR FOR THE CLASS OF 1916

Elective	3	E. E. 56 (34)—Electrical Design	4
M. E. 11 (15)—Thermodynamics	3	Elective	3
M. E. 61 (13)—Mechanical Laboratory	2	R. E. 63 (63)—Electric Railway Laboratory	2
R. E. 62—Electric Railway Laboratory	2	R. E. 65 (65)—Electric Railway Economics	4
R. E. 64 (64)—Electric Railway Practise	3	R. E. 30 (30)—Thesis (or elective)	3
R. E. 66—Electric Railway Machinery	3		
R. E. 67 (10)—Seminar	1	Total	16
Total	17		

[1] Semester hours. For definition, see page 263.

[2] The numbers refer to courses in the Description of Courses, page 261. Numbers in parenthesis are old numbers.

Course in Railway Mechanical Engineering as Taught in 1914-15

FIRST YEAR

FIRST SEMESTER	S. H.[1]
Chem. (1b) or (1a)[2]—Inorg. Chemistry	4
G. E. D. (1)—Gen. Eng. Drawing	4
Math. (2)—Advanced Algebra	3
Math. (4)—Trigonometry	2
Rhet. (1)—Rhetoric and Themes	3
Mil. 2a (2)—Military Drill	1
P. T. (1)—Gymnasium	1
Total	18

SECOND SEMESTER	S. H.[1]
Chem. (4)—Advanced Chemistry	4
G. E. D. (2)—Descriptive Geometry	4
Math. (6)—Analytic Geometry	5
Rhet. 2 (1)—Rhetoric and Themes	3
Mil. 2b (2)—Military Drill	1
Mil. (1)—Drill Regulations	1
P. T. 2 (1)—Gymnasium	1
Total	19

SECOND YEAR

Math. (7)—Differential Calculus	5
M. E. (4)—Machine Design	2
M. E. 81 (42)—Machine Work	3
Phys. 1a (1)—Physics Lectures	3
Phys. 3a (3)—Physics Laboratory	2
Rhet. (1)—Rhetoric and Themes	3
Mil. 2c (2)—Military Drill	1
Total	19

Math. (9)—Integral Calculus	3
M. E. 2 (16)—Steam Engineering	3
M. E. 82 (42)—Machine Work	2
Phys. 1b (1)—Physics Lectures	2
Phys. 3b (3)—Physics Laboratory	3
Rhet. 2 (1)—Rhetoric and Themes	3
T. & A. M. 20 (7)—Analytic Mechanics	3
Mil. 2d (2)—Military Drill	1
Total	19

THIRD YEAR

Chem. (1a) or (1b)—Inorganic Chemistry	4
Non-technical Elective	3
Math. (9a)—Integral Calculus	2
R. E. 25—Ry. Development	3
T. & A. M. 21 (8)—Analytic Mechanics	2
T. & A. M. 29 (9)—Resistance of Materials	5
Total	19

Chem. (16)—Engineering Chemistry	3
Non-technical Elective	3
M. E. 12 (15, 23)—Thermodynamics	5
M. E. 64 (3)—Power Measurements	3
R. E. 6—Locomotives	4
Total	18

FOURTH YEAR

Econ. (2)—Principles of Economics	2
E. E. 12 (6)—Alternating Currents	2
M. E. (8)—Mech. of Mach'y	3
R. E. (1)—Locomotives	2
R. E. (2)—Locomotive Design	3
R. E. (4)—Locomotive Performance	2
R. E. (8)—Dynamometer Car Tests	2
R. E. 9 (10)—Seminar	1
Total	17

C. E. 96 (10)—Surveying	2
Econ. (16)—Economics Problems	2
R. E. (3)—Shops and Auxiliary Equipments	2
R. E. (7)—Advanced Design	3
R. E. (10)—Seminar	1
R. E. (30)—Thesis	3
R. E. (61)—Traction	3
Total	16

Course in Railway Mechanical Engineering as Taught in 1915-16

FIRST YEAR FOR THE CLASS OF 1919

Chem. (1b or 1a)—Inorganic Chemistry	4
G. E. D. (1)—General Engineering Drawing	4
Math. (2)—Advanced Algebra	3
Math. (4)—Trigonometry	2
Rhet. (1)—Rhetoric and Themes	3
Mil. 2a (2)—Military Drill	1
P. T. (1)—Gymnasium	1
Total	18

Chem. (4)—Advanced Chemistry	4
G. E. D. (2)—Descriptive Geometry	4
Math. (6)—Analytic Geometry	5
Rhet. 2 (1)—Rhetoric and Themes	3
Mil. 2b (2)—Military Drill	1
Mil. (1)—Drill Regulations	1
P. T. 2 (1)—Gymnasium	1
Total	19

Summer Reading, 50 points

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[1]Semester hours. For definition, see page 263.

[2]The numbers refer to courses in the Description of Courses, page 261. Numbers in parenthesis are old numbers.

SECOND YEAR FOR THE CLASS OF 1918

Language	4	Language	4
Math. (7)—Differential Calculus	5	M. E. 75—Forge Work	1
M. E. 79 (41)—Pattern Work	3	M. E. 77—Foundry Work	2
Physics 1a (1)—Physics Lectures	3	Math. (9)—Integral Calculus	3
Phys. 3a (3)—Physics Laboratory	2	Phys. 1b (1)—Physics Lectures	2
Mil. 2c (2)—Military Drill	1	Phys. 3b (3)—Physics Laboratory	2
		T. & A. M. 20 (7)—Analytic Mechanics	3
Total	18	Mil. 2d (2)—Military Drill	1
		Total	18

Summer Reading, 50 points.

THIRD YEAR FOR THE CLASS OF 1917

Chem. (1b or 1a)—Inorganic Chemistry	4	Chem. (16)—Engineering Chemistry	3
Non-technical Elective	3	Non-technical Elective	3
Math. (9a)—Integral Calculus	2	M. E. 12 (7)—Thermodynamics	5
R. E. 25—Ry. Development	3	M. E. 64 (3)—Power Measurement	3
T. & A. M. 27 (8)—Analytic Mechanics	3	R. E. 6—Locomotives	4
T. & A. M. 25 (9)—Resistance of Materials	4		
Total	19	Total	18

FOURTH YEAR FOR THE CLASS OF 1916

Non-technical Elective	3	Non-technical Elective	2
E. E. 11—D. C. Apparatus	3	E. E. 12—A. C. Apparatus	3
E. E. 61—D. C. Laboratory	1	E. E. 62—A. C. Laboratory	1
M. E. 37—Science of Management	3	R. E. (7)—Adv. Design	3
R. E. (2)—Locomotive Design	3	R. E. (8)—Railway Laboratory	2
R. E. 5—Railway Laboratory	3	R. E. (30)—Thesis	3
R. E. 9 (10)—Seminar	1	R. E. (61)—Traction	3
Total	17	Total	17

THE COLLEGE OF AGRICULTURE

For the *buildings* used by this College, see page 53; for a list of its *courses,* page 67; for *clubs auxiliary to its courses of study,* page 112; for *honors,* page 94; for *honorary societies,* page 111; for *fees* and *expenses,* page 118.

GENERAL STATEMENT

This College offers courses of instruction to both men and women. The courses offered are designed for three distinct purposes:

First, and mainly, to train for the profession of farming.

Second, to train for the teaching of agriculture in the public schools.

Third, to train for the profession of landscape gardening.

The courses for women, offered by the department of household science, have two purposes in view:

First, and mainly, to train young women in the science and art of household affairs.

Second, to prepare teachers for giving instructions in domestic science in high schools, and, in connection with the College of Liberal Arts and Sciences, to fit for college and university positions.

In the case of both men and women the great purpose is to prepare for the practical affairs of life. Since technical knowledge and skill should be developed along with, and not at the expense of, those things which tend to the production of cultured and versatile men and women, the technical work is closely associated with the related sciences, and students are required to divide their time fairly with those subjects that develop general knowledge and breadth of view.

The College offers over ninety courses of instruction in technical subjects, besides opportunity to elect from the scientific and literary offerings of the other colleges of the University.

The elective system prevails, and with a few exceptions the student is left free to select those subjects which seem best fitted to meet his needs, always under the advice and guidance of the faculty.

Credit is given for all work accomplished; this credit counts toward graduation if the student desires a degree.

ADMISSION

For the regulations in regard to admission to the College of Agriculture, see the general statement of the entrance requirements of the University, pages 69-91.

ADMISSION TO GRADUATE WORK IN AGRICULTURE

While in general it will be expected that applicants for admission to the Graduate School shall have had an undergraduate course in scientific and tech-

nical agriculture equivalent to that of the University of Illinois, yet students who are otherwise eligible for admission to the Graduate School may be admitted to graduate standing in agriculture if they have had a thorough training in the sciences underlying it, even though their undergraduate course of study lacked to some extent the amount and kind of technical work included in our course.

SCHOLARSHIPS IN AGRICULTURE AND HOUSEHOLD SCIENCE

For detailed information concerning scholarships in agriculture and household science, see page 114.

FACILITIES FOR INSTRUCTION AND METHODS OF WORK

The affiliation of the College with the work of the Agricultural Experiment Station not only enables the University to support a larger faculty than would otherwise be possible, but also permits a higher degree of specialization. For the most part those who teach in the College are the ones who conduct experiments in the same subjects in the Station.

The methods of instruction vary with the nature of the courses. In general the laboratory method prevails. Text-books are used whenever good ones are available. Both the laboratory and the text are supplemented by lectures and reference readings. Buildings and laboratory space, illustrative specimens and material, and library facilities are provided.

AGRICULTURAL EXTENSION

Agricultural extension work serves as the intermediary between the College of Agriculture and the Agricultural Experiment Station and the local community and the farm. Each department does extension work, and so far as possible provides special men for such work. The responsibility for the work of these men lies with their own department. For this reason not all of the extension effort issues from one office.

For administrative purposes and to coordinate these activities through a regular channel, agricultural extension is administered as a separate department, conducting all extension enterprises which do not deal with technical subjects and cooperating with other departments in diffusing the results of their work in the State.

Some of the general extension enterprises are: agricultural extension schools and demonstrations in different localities; the Two Weeks' Course given annually at the College in January; helping at farmers' institutes and similar gatherings, with special railway lecture trains, at the boys' state fair school, and in educational exhibits at fairs and elsewhere; welfare work in rural communities; and excursions to the College.

Aside from this, courses of study are offered to assist in determining what phases of agriculture are suitable for secondary school purposes and how they should be taught, and for the discussion of organization, extension projects, and methods.

AGRONOMY

The department of agronomy gives instruction in those subjects which relate especially to the field and its affairs, as drainage, farm machinery, field crops;

the chemistry, physics, and bacteriology of the soil; manures and rotation in their relation to fertility; plant breeding. The department possesses equipment and facilities for instruction in these subjects, and added to this are opportunities for contact with the research work of the Agricultural Experiment Station, especially in crop production, soil fertility, and plant breeding, both in the analytical and pot culture laboratories and on the experiment fields at the University and in other parts of the State.

Attention is called here to the fact that in case circumstances prohibit a regular four-year course, it is possible for a student who has had sufficient preparatory training so to arrange his studies as to obtain the necessary prerequisites and complete the general courses in soil physics and soil fertility in two years' time. (See Agronomy 9 and 12.)

ANIMAL HUSBANDRY

This department offers courses covering the separate study of sheep, swine, poultry, and beef cattle and their products; heavy and light horses with their care and training; the management of herds, flocks, and studs; the principles and practise of feeding, of breeding, and of marketing; and the chemical and physiological phases of animal nutrition.

The University herds, flocks, and studs contain about 500 pure-bred cattle, sheep, swine, and horses, and in addition several hundred fowls, ducks, and turkeys, which are always available for class purposes. These animals are also used for investigations in feeding and breeding, and for illustration of breed types and characteristics. They consist of Shorthorn, Hereford, and Aberdeen-Angus cattle; Shropshire, Oxford, Southdown, Hampshire, Rambouillet, Dorset, and Cheviot sheep; Poland-China, Berkshire, Duroc Jersey, Chester White, Tamworth, Large Yorkshire, and Hampshire swine; Percheron, Standard-bred, Shire, and American Saddle horses. In addition to the above pure-bred livestock, a large number of grade animals of the various classes of livestock furnish ample material for judging practises. In these practises, besides illustrating standard market classes and grades of livestock, special attention is given to instruction in the selection of animals according to feed lot and market requirements. The new stock pavilion offers every opportunity for show and judging work. (For detailed description see page 53.) The lectures of the various courses are supplemented by 1,000 or more lantern slides, charts, diagrams, models and photographs. Pedigree and breed work is facilitated by 75 sets of the different herd, stud, and flock registers, and complete files of the leading American and British journals.

The equipment for instruction and investigation in the feeding, breeding, and management of livestock consists of modern buildings for the housing of beef cattle, swine, sheep, horses, and poultry, with the appliances necessary for individual and collective feeding tests; brick-paved feed lots and open sheds, in which steers may be fed in carload lots; a feed storage barn, with various forms of grinding mills and other machinery for the preparation of feed; and various kinds of harness, vehicles, and other appliances for the training of horses. The department also maintains a cold storage room and other equipment for conducting demonstrations in the cutting and handling of meats; a collection of wool samples, a fibre testing machine, and microscopes for the study of wool. The chemical and physiological laboratories of the department afford facilities for advanced work in animal nutrition.

DAIRY HUSBANDRY

The department of dairy husbandry offers courses under the four divisions of economic milk production, city milk supply, dairy bacteriology, and dairy manufactures.

For instructional and experimental purposes two herds of dairy cows are maintained, a grade herd used primarily for experimental purposes, and a pure bred herd composed of Holstein-Friesians, Guernseys, Jerseys, and Ayrshires.

For instruction in dairy cattle and economic milk production, free use is made of both herds.

The actual business of economic milk production is illustrated by a twenty-acre dairy farm conducted by the department for the purpose of producing the most milk possible per acre, at the least expense. The feeding and breeding experiments, while conducted primarily for the use of the Experiment Station, are of value to the student.

Practical instruction in city milk supply is given in a dairy building used exclusively for cooling and bottling milk from the University herds. Sanitary methods of delivery are still further illustrated in the daily distribution of this milk on the University milk route.

Bacteriological laboratories afford facilities for instruction in the courses in dairy bacteriology and city milk supply, and for bacteriological studies necessary when outbreaks of communicable disease appear to be due to the local milk supply. These laboratories are used also in the investigation of specific dairy problems.

Instruction in manufactured dairy products is provided in the University creamery, where the manufacture of butter, ice cream, condensed milk, and the various varieties of cheese is conducted on a commercial scale.

The creamery is equipped with separators, pasteurizers, cream ripeners, churns, condensing pan, ice cream and refrigerating machinery, to which all students have free access for laboratory purposes. In addition to this, the creamery and apparatus are used in the investigation of problems involved in the manufacture of dairy products.

HORTICULTURE

The department of horticulture offers instruction in forty-eight courses, covering the five divisions of horticulture (pomology, olericulture, floriculture, landscape gardening, and forestry), and also in subjects dealing with principles and practises applicable to all the divisions, such as plant propagation, spraying, the evolution of horticultural plants, and experimental horticulture.

For instruction in pomology, use is made of the various fruit plantations maintained by the department. The orchards of different ages afford opportunities for practise in pruning and studies of tree types, while the products furnish materials for practise in the grading and packing of fruits and the study of systematic pomology. A collection of fruit packages is maintained to illustrate the various types used in commercial packing. There is also a collection of wax models of fruits representing the principal varieties grown in Illinois.

For the use of students in olericulture, or vegetable gardening, certain areas of ground are reserved on which garden operations are illustrated and various crops are grown. In addition to the land, the equipment for instruction in veg-

etable gardening consists of a greenhouse 105x28 feet, hotbed frames and sash, seed drills and wheel hoes of various types, an assortment of hand tools, markers, planters, and other accessories and appliances for the growing and handling of vegetables.

The equipment for instruction in floriculture includes ten glass houses covering an aggregate area of 28,000 square feet. Six of these houses, including the palm house with an area of 3,200 square feet, are used for instructional work exclusively, while the other four are intended primarily for experimental purposes, but incidentally add to the facilities for giving instruction in floriculture as conducted on a commercial basis. Besides roses, carnations, and chrysanthemums, the houses contain a selection of plants representing all the forms used in commercial and decorative or conservatory work. In connection with the greenhouses there is a service building, containing laboratories, class rooms, and offices, as well as potting, storage, and work rooms. An assortment of florists' supplies is maintained. Floricultural periodicals, reference books, and a series of over five hundred slides add to the equipment. The ornamental gardens maintained by the department furnish illustrative materials for students in both floriculture and landscape gardening.

The equipment for instruction in landscape gardening includes four drafting rooms with desks for individuals, together with modern filing devices for office practise, seminar rooms, lecture rooms, offices, and a library. The library of the division of landscape gardening contains a complete collection of books, periodicals, pamphlets, photographs of examples of both foreign and American landscape gardening, as well as works on civic design, all of which material is carefully indexed for reference and research work. A collection of representative drawings and blue-prints from the offices of practising landscape architects further augments the books and periodicals of the library.

The collection of trees and shrubs growing upon the campus and about certain residences in the vicinity of the University furnishes material for plant studies in connection with the courses in planting design, which list is greatly increased by the systematically arranged, carefully preserved specimens available for reference in the herbarium of the division of landscape gardening. A series of 1,500 lantern slides is used in the lectures in landscape gardening.

Instruction in forestry is facilitated by a collection of native woods and a forest tree plantation of about twenty acres, consisting of Scotch pine, white pine, Norway spruce, European larch, green ash, black walnut, hickory, bur oak, white elm, and other species.

HOUSEHOLD SCIENCE

The courses of instruction given in this department are planned to meet the needs of two classes of students, viz.: (a) those specializing in other lines of work, but desiring a knowledge of the general principles and facts of household science; (b) those who wish to make a specialty of household science.

The department is housed in the north wing of the Woman's Building. The kitchen for extension work, with dining room adjoining, is in the basement. The first floor contains two class rooms, a seminar room, an exhibition room for illustrative material for work in house construction and textile fabrics, offices, and cloak rooms. On the second floor are individual, diet, institutional, and class kitchens, small and large dining rooms, chemical laboratory, two large sewing rooms, offices, and store rooms. On this floor provision is made

for the study of the preparation and service of food in large quantities in the institutional kitchen and large dining room adjoining. The equipment on this floor provides practise for those interested in the problems of lunch room management and for dietitians. The third floor contains additional sewing rooms, offices, equipment for teaching home care of the sick, and an apartment in which the problems of house construction, house furnishing, and household administration are studied.

VETERINARY SCIENCE

In the department of veterinary science the student is instructed in subjects relating to the prevention of disease among domestic animals and their treatment when affected by disease.

REQUIREMENTS FOR GRADUATION

Students who have satisfied all matriculation requirements and have maintained throughout their course a satisfactory record of scholarship and moral character will be graduated with the degree of Bachelor of Science, upon having completed the studies of the prescribed list and sufficient electives to make a total of 130 semester hours.

A thesis is not required for graduation, but any student who has completed not less than 90 hours of credit before the senior year may then elect a thesis course in any department in which he has done not less than 20 hours work, subject to the approval of the head of the department in question.

Graduates of approved colleges may expect to secure a degree in agriculture from the University of Illinois upon a completion of the technical and scientific requirements. This will ordinarily require approximately two years of residence work; a minimum of one year will be exacted.

GENERAL COURSE IN AGRICULTURE

All students except those in the special courses in household science, floriculture, and landscape gardening are required to take the same work during the freshman year and part of the sophomore year. This work gives the student a correct conception of the fundamental farm practises and an insight into the technical branches of agriculture, such as animal and dairy husbandry, horticulture, farm crops, soils, farm mechanics, and buildings, and leaves the junior and senior years open for election.

One hundred thirty hours are required for graduation, as follows:

Agriculture prescribed first two years	19 hours	
Agriculture prescribed as electives	40 hours	
Total agriculture required		59 hours
Non-agriculture prescribed	42 hours	
Non-agriculture prescribed as electives	15 hours	
Total non-agriculture required		57 hours
Open electives		14 hours
		130 hours

Prescribed Subjects

Required for the Degree of Bachelor of Science in the General Course in Agriculture

FIRST YEAR

FIRST SEMESTER	S. H.	SECOND SEMESTER	S. H.
Chemistry 1	5	Chemistry 2 and 3	5
Rhetoric 1*	3	Rhetoric 2	3
Agronomy 25	4	Animal Husbandry 5	3
Horticulture 1a	2	Dairy Husbandry 3	1
Agricultural Extension 4a	½	Horticulture 1b	2
Military 2	1	Agricultural Extension 4b	½
Physical Training	1	Military 1 and 2	2
		Physical Training	1

SECOND YEAR

Chemistry 13a or Botany 1	5	Botany 1 or Chemistry 13a	5
Animal Husbandry 6	3	Agronomy 26	3
Military 2	1	Military 2	1
Electives		Electives	

In addition to the above, students will take the following:

Agriculture, electives	40 hours
Non-agriculture, electives	15 hours
English 20	4 hours
Science, elective	5 hours
Open electives	14 hours

Students registered previous to September, 1912, will meet the requirements outlined below so far as it is possible to do so:

Prescribed Subjects

Required for the Degree of Bachelor of Science in the General Course in Agriculture

Agronomy 6 or 7, 9, 12	12½	hours
Animal Husbandry 7	3	hours
Chemistry 1, 2, 3, 13a	15	hours
Dairy Husbandry 1	3	hours
Economics 2	2	hours
English 1 or 20†	4	hours
Entomology 4	3	hours
Horticulture 1, 10a	8	hours
Military 1, 2	5	hours
Physical Training 1, 1a	2	hours
Rhetoric 1-2	6	hours
Animal Husbandry 30 (Genetics)	5	hours
Total prescribed subjects	68½	hours

*Those students who show by examination a proficiency in composition sufficient to qualify them for the second semester's work in Rhetoric 1 may be excused from the first semester's work. See page 75.

†If English 1 is elected, it must be followed by English 2 the second semester.

Elective List A; a minimum of	4	hours
Elective List B; a minimum of	3	hours
Elective List C; a minimum of	25	hours
Elective List D; a minimum of	10	hours
Total	42	hours

Elective Lists

List A—Animal Husbandry 1 to 4, 11 to 14, 17 to 18, 22
Dairy Husbandry 2
List B—English Literature 2*, 12-13, 23
Rhetoric 19, 3
List C—This list includes all subjects offered in technical agriculture and not included in the prescribed list, viz.:
Agricultural Extension 1, 3
Agronomy 1 to 8, 10, 13, 16 to 22
Animal Husbandry 1 to 4, 8 to 14, 16, 18, 21 to 23b
Dairy Husbandry 2, 7, 8, 11 to 22
Horticulture 2 to 9, 10b to 15b, 17 to 34
Veterinary Science 2, 4, 5, 6
List D—Botany 1, Botany 5, Zoology 1

Summary

Total prescribed subjects	68½	hours
Total list electives	42	hours
Total open electives	19½	hours
Total	130	hours

GENERAL COURSE IN FLORICULTURE

Course Required for the Degree of Bachelor of Science in Floriculture

The object of this course is to fit men and women for the profession of floriculture. The laboratory exercises in the technical subjects consist of practical work in the greenhouses and garden and give the student a working knowledge of the best methods now in use.

FIRST YEAR

FIRST SEMESTER *Prescribed Subjects*		SECOND SEMESTER *Prescribed Subjects*	
Entomology 4a	3	Chemistry 2	2
Chemistry 1	5	Chemistry 3	3
Horticulture 4	4	Horticulture 5	5
Rhetoric 1	3	Rhetoric 2	3
Military	1	Military	2
Physical Training	1	Physical Training	1
Total	17	Total	16

SECOND YEAR

FIRST SEMESTER *Prescribed Subjects*		SECOND SEMESTER *Prescribed Subjects*	
Botany 1	5	Agronomy 9	5
English 20	4	Horticulture 15a	5
Military	1	Military	1
Total	10	Total	11

*Open to those who elected English 1.

THIRD YEAR

FIRST SEMESTER *Prescribed Subjects*		SECOND SEMESTER *Prescribed Subjects*	
Botany 7a	5	Botany 3b	5
Horticulture 15b	5	Horticulture 7	3
Economics 2	2	Horticulture 24a	3
Total	12	Total	11

FOURTH YEAR

FIRST SEMESTER *Prescribed Subjects*		SECOND SEMESTER *Prescribed Subjects*	
Horticulture 31	3	Horticulture 30	5
Horticulture 24b	3	Horticulture 10b	3
		Horticulture 32	4
Total	6	Total	12

Suggested Electives

Accountancy
Agronomy 12
Animal Husbandry 20
Botany 3a, 4a, 7b
Chemistry 13a
Economics
Horticulture 28

Total prescribed subjects 95
Open electives 35

Total required 130

GENERAL COURSE IN HOUSEHOLD SCIENCE

Of the 130 hours required for graduation, 91 are provided for in the prescribed list and the restricted electives of List A. The other 39 hours of credit necessary for graduation may be taken, subject to the approval of the Dean of the College, from any courses offered in the University. Holders of scholarships in household science in this College take the course as laid out here. Variations from it can be made only by special permission of the Council of Administration on recommendation of the faculty of the College.

Prescribed Subjects

Required for the Degree of Bachelor of Science in General Course in Household Science

Art and Design 1, 12, 19, 20	9 hours
Bacteriology 5	5 hours
Botany 1	5 hours
Chemistry 1, 2, 3	10 hours
English 1-2	8 hours
Household Science 1, 2, 3, 5, 6, 7, 10, 12, 14	20 hours
History 1a-1b, or 3a-3b	6 or 8 hours
Physiology 4	5 hours
Physical Training 7a-7b, 9	3 hours
Rhetoric 1-2	6 hours
Zoology	5 hours
English or Rhetoric	5 hours
*List A, a minimum of	4 hours
Total required subjects	91 to 93 hours
Electives	39 to 37 hours
Total	130 hours

*If physics has not been offered for entrance, its equivalent should be elected.

Electives

List A—English 21, 22, 23, 24
Horticulture 1a, 1b, 2, 3, 5, 19, 28, 10a
Household Science 5, 13, 14
Economics 2, 22, 26; Sociology 1
Physics 7a, 8a
Education 1, 10
Agronomy 7, 25, 9, 12
Animal Husbandry 10, 5
Dairy Husbandry 1, 3, 19, 11, 4
Agricultural Extension 1, 3, 4, 5

COURSE OF INSTRUCTION

First Year

1. Household Science 2; Chemistry 1; Rhetoric 1; Physical Training 7a and 9; Art and Design 1.
2. Household Science 1, 7; Chemistry 2, 3; Rhetoric 2; Physical Training 7b.

Second Year

1. Household Science 6; Zoology 1; English 1; electives.
2. Botany 1; Art and Design 12; English 2; electives.

Third Year

1. Art and Design 19; Physiology 4; advanced English; electives.
2. Household Science 3, 5, 12; advanced English; Economics 2; Art and Design 20; electives.

Fourth Year

1. Sociology 1; Education 1, History 3a.
2. Education 10; Bacteriology 5; History 3b; Household Science 10.

GENERAL COURSE IN LANDSCAPE GARDENING

Course Required for the Degree of Bachelor of Science in Landscape Gardening

A four years' course in preparation for professional practise is open to any student in the University having the prerequisites or their equivalents.

FIRST YEAR

FIRST SEMESTER		SECOND SEMESTER	
Prescribed Subjects		*Prescribed Subjects*	
Math. 4—Trigonometry	2	Entomology 4b—Introduction to Economic Entomology	3
Rhet. 1—Rhetoric and Themes	3	Rhet. 2—Rhetoric and Themes	3
Arch. 31—Drawing	4	Arch. 32—Architectural Drawing	4
Botany 1—Introductory Course	5	Hort. 5—Plant Propagation	3
Military and Physical Training	2	Military and Physical Training	3
Hort. 39a—Special Lectures	1	Hort. 39b—Special Lectures	1
Total	17	Total	19

SECOND YEAR

FIRST SEMESTER

Prescribed Subjects

Hort. 10a—Landscape Gardening	3
Hort. 21a—Landscape Design	4
Botany 4d—Taxonomy	3
Hort. 31—Garden Flowers	3
Military	1
C. E. 31—Surveying	3
Hort. 39a—Special Lectures	1
Total	18

SECOND SEMESTER

Prescribed Subjects

Hort. 21b—Landscape Design	4
Hort. 24a—Trees and Shrubs	3
C. E. 32—Surveying	3
Military	1
Hort. 39b—Special Lectures	1
Total	12

Electives

Plants—

Hort. 2—Small Fruits	2

Design—

Art and Des. 12—Theory and Prac	5
Geology 12	5

THIRD YEAR

FIRST SEMESTER

Prescribed Subjects

Hort. 23a—Landscape Design	4
Hort. 24b—Trees and Shrubs	3
Hort. 27a—Landscape Practise	3
Arch. 6a—History of Architecture	4
Hort. 39a—Special Lectures	1
Total	15

Electives

Plants—

Hort. 8—Fruit Culture	5

Design—

Hort. 29a—Garden Design	3
Art and Design 13—Hist. and Pract	2

Civic Design—

Economics 2—Prin. of Econ	2
Sociology 1—Prin. of Soc	3

SECOND SEMESTER

Prescribed Subjects

Hort. 23b—Landscape Design	4
Hort. 26a—Planting Design	3
Hort. 27b—Landscape Practise	3
Arch. 6b—History of Architecture	4
Hort. 36—Landscape Reading	2
Hort. 39b—Special Lectures	1
Total	17

Electives

Plants—

Hort. 7—Spraying	3
Hort. 9—Forestry	2

Design—

Hort. 29b—Garden Design	3
Art and Design 8—Modeling	2

Civic Design—

Rhetoric 17—Adv. Comp	3
Sociology 7—The Rural Community	2

FOURTH YEAR

FIRST SEMESTER

Prescribed Subjects

Hort. 25a—Landscape Design	5
Hort. 26b—Planting Design	3
Hort. 37a—Civic Design	3
Hort. 39a—Special Lectures	1
Total	12

Electives

Plants—

Hort. 40a	3

Design—

Hort. 25a (Extra hours)

Art and Design 4—Water color	2

Civic Design—

Sociology 10—Population	3
Pol. Sci. 4—Municipal Government	3

SECOND SEMESTER

Prescribed Subjects

Hort. 25b—Landscape Design	5
Hort. 28—Exotics	1
C. E. 52—Roads and Pavements	2
Hort. 38—Field Practise	2
Hort. 37b—Civic Design	3
Hort. 39—Special Lectures	1
Total	14

Electives

Plants—

Hort. 15a—Plant Growing	5

Hort. 40b—Trees and Shrubs

Design—

Hort. 25b (Extra hours)

General Electives

Modern language	8
Zoology 1	5
Horticulture 19	3
Horticulture 39	1-8

REQUIREMENTS FOR GRADUATION

The requirements for the degree of Bachelor of Science in Landscape Gardening are as follows:

1. The student must complete the work outlined in the course as prescribed subjects.

2. From the elective subjects enough additional credits must be obtained to complete the graduation requirement of 130 hours.

GENERAL COURSE FOR PROSPECTIVE TEACHERS OF AGRICULTURE

A general course is offered for prospective teachers of agriculture. Among the subjects recommended are the following:

Agronomy 2, 9, 12, 25, 26; Animal Husbandry 1a, 2a, 4a, 5, 6, 11a, 11b, 30*; Dairy Husbandry 2, 3; Horticulture 1a, 1b, 3, 5, 10a, 19; Agricultural Extension 1, 4-5; Botany 1, 3b; Chemistry 1, 2, 3, 13a; Entomology 4a-4b; Zoology 1; English 20; Rhetoric 1-2, 19; Public Speaking 5-6; Economics 2; Education 1, 6; Library Science 12; Military 1, 2; Physical Training 1-2, 1 a; foreign language.

For further information concerning this course, address the Dean of the College of Agriculture.

TWO WEEKS' COURSE IN AGRICULTURE AND HOUSEHOLD SCIENCE

Agriculture

The Corn Growers' and Stockmen's Convention is held usually at the College of Agriculture (not held in 1915). At the time of this meeting, the College gives instruction for two weeks in subjects of special interest to young men on the farm, such as corn and stock judging, milk and seed testing, soils, etc. A morning session of two hours each day is devoted to the discussion of questions of importance to the farmer In the afternoon an hour is given to lectures upon topics of general interest. The rest of the day is filled with class work in the subjects mentioned above. Each year about a thousand men who are unable to spend a longer time away from home avail themselves of this opportunity to come in touch with the work of the College.

Household Science

At the same time, a two-weeks' course in household science consisting of lectures and recitation work is given in the rooms of the department of household science in the Woman's Building.

Admission

No entrance examinations are required and any farmer or farmer's son or daughter may enter these courses. It is important that everyone should be here at the opening of the session. Upon arrival at Champaign or Urbana, application should be made at the University Young Men's Christian Association, where information concerning board and room may be obtained.

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*Students taking the Teachers' course may take Animal Husbandry 30 for one-half semester and receive 2½ credits therefor.

THE GRADUATE SCHOOL

THE EXECUTIVE FACULTY

EDMUND JANES JAMES, Ph.D., LL.D., PRESIDENT OF THE UNIVERSITY

DAVID KINLEY, Ph.D., LL.D., *Dean of the Graduate School, Professor of Economics*
BOYD HENRY BODE, Ph.D., *Professor of Philosophy*
ALBERT PRUDEN CARMAN, A.M., D.Sc., *Professor of Physics*
JULIUS GOEBEL, Ph.D., *Professor of Germanic Languages*
GEORGE ALFRED GOODENOUGH, M.E., *Professor of Thermodynamics*
HARRY ALEXIS HARDING, Ph.D., *Professor of Dairy Bacteriology*
LAURENCE MARCELLUS LARSON, Ph.D., *Professor of History*
HERBERT WINDSOR MUMFORD, B.S., *Professor of Animal Husbandry*
WILLIAM ABBOTT OLDFATHER, Ph.D., *Associate Professor of Classics, Secretary*
STUART PRATT SHERMAN, Ph.D., *Professor of English*
ARTHUR NEWELL TALBOT, C.E., *Professor of Municipal and Sanitary Engineering*
EDGAR JEROME TOWNSEND, Ph.D., *Professor of Mathematics*
HENRY BALDWIN WARD, Ph.D., *Professor of Zoology*
EDWARD WIGHT WASHBURN, Ph.D., *Professor of Physical Chemistry*

HISTORY AND ORGANIZATION

Although for many years the University of Illinois had offered advanced students facilities for study and research in various lines, graduate work was undertaken under the name of the Graduate School for the first time in 1892. In 1894 the administration of the school was vested in the Council of Administration, and the Vice-President of the University became Dean of the School. In 1906 the Graduate School was organized as a separate faculty, consisting of a dean and members of the University faculty assigned to this duty by the President. No means of support were provided, however, separate from those provided for the undergraduate work. In the winter of 1906-7, the Forty-fifth General Assembly of the State passed an act appropriating $50,000 a year for the support of a Graduate School of Fine Arts and Sciences in the University. This appropriation has been continued by succeeding legislatures.

By act of the Trustees the teaching faculty of the Graduate School includes all members of the faculty who give instruction in courses approved for graduate credit. The affairs of the School, however, are in charge of the executive faculty appointed each year by the President.

ADMISSION

Admission to the Graduate School of the University of Illinois is substantially admission to candidacy for the master's degree. That is to say, no applicant is admitted unless his previous education has been such that he is fully prepared to undertake work of graduate character, so that, assuming him to have had the specific prerequisites for his major subject, he can expect to get

his master's degree in one year. Applicants are not admitted if their previous education is such that, aside from the specific prerequisites for their major study, the performance of the work necessary for attaining the master's degree in one year is impossible or highly improbable. Therefore, for admission to the Graduate School to work for a degree an applicant must hold a first degree either from the University of Illinois or from some other university or college of equivalent standing. Admission to particular graduate courses or departments may be secured only by those who have had the requisite undergraduate work in those courses or departments.

In order to be enrolled as a member of the Graduate School a student must be doing graduate work. The possession of a first degree does not entitle a student to be enrolled in the Graduate School, if the courses which he is taking are undergraduate.

Students of mature age who do not hold a first degree, but satisfy the Dean of the School and the officers of the departments in which they wish to work of their earnestness of purpose and special fitness, may be permitted to take work in the Graduate School without reference to candidacy for a degree. In order to secure this permission, however, a candidate must have had such preliminary preparation for the work he wishes to take up as would justify his admission to the Graduate School as a candidate for a degree if he could meet the other requirements fully.

Application blanks may be secured from the Dean of the Graduate School.

REGISTRATION

After the students' application for admission has been approved, he receives at the Dean's office a permit to register and also a study blank. This study blank must be filled out with the advice of the professors in charge of the selected work.

The person in charge of the major work of the student becomes his adviser, and, together with those with whom the student is taking first and second minor courses, forms a committee with general supervision over the student's general course of study. The chairman of this committee is expected to follow the student's work and see that he is helped to lay out an intelligently planned course, and to give him such advice as may be necessary concerning his scholastic career.

Each student is required to attend a minimum of four class, lecture, or laboratory, exercises per week, in the first year of his graduate study; and in no case is he permitted during his course to attend more than twelve per week.

Each first year student doing full work must take at least four unit courses. A unit course is one which requires ten hours of time per week through one semester, irrespective of the mode of distribution of that time in class work, laboratory work, and private study. Four such courses or their equivalent constitute a full minimum program for one semester, and eight such courses, or their equivalent of graduate grade, constitute the minimum year's work required for a master's degree.

Therefore, registration for full work for the master's degree ordinarily provides for three unit courses, or their equivalent, per semester, in addition to a thesis, the time devoted to the thesis being ordinarily reckoned as equivalent to that for one unit course, or ten hours of time a week. If a student is excused from writing a thesis he must take four unit courses or their equivalent per semester.

Unless otherwise specified by the department concerned, a course for graduates and advanced undergraduates, not open to students below senior grade and counting four or five hours of undergraduate credit, if taken by graduate students, will be treated as a unit course; when counting less than four hours of undergraduate credit, such a course, if taken by graduate students, will be treated as a half-unit course.

Unless otherwise specified by the department, a course the prerequisites of which are such as to make it possible for juniors or sophomores to be admitted, if taken by a graduate student, is counted as a half-unit course, or a quarter-unit course, according to the number of hours of undergraduate credit for which the course is given.

Graduate students are permitted, under proper circumstances, to attend classes as visitors and to elect miscellaneous subjects which do not count toward their degree. No student who is carrying full work as herein described will be permitted to visit more than one class or to take more than one miscellaneous subject.

The above regulations concerning the program of studies are laid out primarily for first year students. Second and third year graduate students fill out their programs irrespective of unit value, according to their needs, under the advice of their instructors. The work of second and third year graduate students is arranged in quantity and character with sole reference to prospective candidacy for a doctor's degree.

Assistants and others on the University staff who undertake to do graduate work are permitted to take an amount of work determined by the terms of their employment. Such a student, applicant for a master's degree, must ordinarily stay through at least two years. In no case will the doctor's degree be conferred upon an applicant otherwise fit in less than four years if he is on the staff in any capacity.

Residence—Continuous residence and study are required of all members of the Graduate School, unless they are granted leave of absence by the Dean, upon recommendation of the professors in charge of their work, for the purpose of carrying on elsewhere studies or investigation in the line of work for their degrees.

CHARACTER OF GRADUATE WORK

The principal aim of graduate study is the development of the power of independent work and the promotion of the spirit of research. Each candidate for a degree is expected to have a wide knowledge of his subject and of related fields of work; for the graduate student is not expected to get from lecture and laboratory courses all the knowledge and training necessary to meet the requirements for his degree.

Students are warned against restricting themselves merely to the courses prescribed or suggested by the departments in which they are studying. Each student is expected to do a wide range of private reading and study, and in many cases will find it advisable to take one or more courses of lectures quite outside the field of his chosen subject.

THE MASTERS' DEGREES

Candidates for the degree of Master of Arts or Master of Science are required to do at least one year's work in residence and to write a thesis.

A candidate for a master's degree may do all his work in one subject, or he may select a major and one minor, or a major and two minors. A major or minor denotes the field of knowledge of a department, or such part thereof as constitutes a separate and independent division of that field. The candidate must do at least half his work in his major subject.

Each candidate for a master's degree is also required to present a thesis on some subject approved by the professor in charge of his major work and the faculty of the School. The requirement of a thesis may be waived, however, upon the recommendation of the head of the department in which the student is doing his major work, and the approval of the Dean, provided application to waive the thesis is made at the beginning of the year. *In no case will permission to take the degree without the thesis be given if applied for later than the latest date for the approval of thesis subjects, as shown by the calendar.*

The thesis required from a candidate for a master's degree ordinarily will demand about one-fourth of the student's time. The thesis must be typewritten, on "thesis paper," and the title-page must be printed. The thesis in its final form, together with a certificate of approval by the proper officer, must be left by the professor in charge at the Dean's office at the time set in the calendar.

Credit for work done elsewhere is not "transferred." The candidate is examined here on all the work required for the degree.

Students should note, moreover, that all the work for the master's degree must be done in residence, excepting in the case of members of the staff who have spent half of their time in study through a year at some other institution, and who then do the rest of the work required during a year's residence here.

The Masters' Degree in Engineering

Two classes of second degrees are open to graduates of the College of Engineering, namely, academic and professional.

The academic second degree in engineering is Master of Science, following Bachelor of Science, in Architecture, Architectural Engineering, Civil Engineering, Electrical Engineering, etc. This degree is conferred in accordance with the regulations described above for *academic work in residence only.*

The *professional* second degrees in Engineering are as follows:

Master of Architecture after B.S. in Architecture.

Architectural Engineer after B.S. in Architectural Engineering.

Civil Engineer after B.S. in Civil Engineering or B.S. in Municipal and Sanitary Engineering.

Electrical Engineer after B.S. in Electrical Engineering.

Mechanical Engineer after B.S. in Mechanical Engineering.

Civil Engineer, Electrical Engineer or Mechanical Engineer after B.S. in Railway Engineering, according to the course.

Professional degrees are conferred upon two classes of candidates: (1) graduates of the College of Engineering of the University of Illinois who have been engaged in acceptable professional work away from the University for a period of not less than three years after receiving the degree of Bachelor of Science; (2) graduates of the University of Illinois, or of institutions of equal standing, who have been engaged in acceptable professional work in residence at the University for a period of not less than three years after receiving the degree of Bachelor of Science.

In "acceptable professional work" may be included contributions to technical literature, activity in professional societies, investigation of engineering problems, and the teaching of engineering subjects.

A candidate must declare his candidacy and file with the Dean of the College of Engineering, as chairman of the committee in charge, a detailed statement covering his professional study and experience, not later than the first Monday in November preceding the commencement at which he proposes to qualify. Prior to December 31 next succeeding, he must submit for approval an outline of his proposed thesis and he must file his completed thesis not later than April 1. If the statement of professional experience and study and the thesis are accepted, the candidate must present himself at commencement in order to receive the degree.

Candidates for professional degrees in engineering who already hold the degree of Master of Science may qualify for the professional degree after two years of professional work.

A candidate for a professional degree in engineering must pay the incidental fee of twenty-four dollars on being notified that his professional study and experience are accepted as qualifying him to enter as a candidate for the degree. No one will be enrolled as a candidate for the degree at the following commencement who does not pay his fee at this time. When a candidate for a professional degree in engineering has once been accepted and paid his fee, he is eligible to receive the degree at any time within five years, without additional fee, on completion of the requirements; provided, however, that unless he completes the requirements within two years his name will be dropped from the list of candidates and in order to receive the degree within the five-year period he must register once more.

THE DEGREE OF DOCTOR OF PHILOSOPHY

General Statement of Requirements.—The requirements for the degree of Doctor of Philosophy are a thorough mastery of a selected field of study, evidence of the power of independent investigation in this field, a broad knowledge of the wider field of study of which this major subject is a part, a general acquaintance with related fields of knowledge and a mastery of all branches of study which are necessary to a full knowledge of the main subject. Each student who is seeking this degree is expected to choose for study and final examination a major subject, or field of study, and a first and second minor. The major subject is the field in which the student expects to become expert and an authority. The first minor should ordinarily be a subject closely related to the major, and, under certain conditions and with proper approval, may be a subdivision of the major field of study. The second minor should be chosen outside of the major field of study.

When a candidate chooses any subject as his major, and a division of that subject as his minor, he is not permitted to choose as a second minor any division of work in that same department, excepting by vote of the executive faculty of the School.

The candidate's list of subjects must receive the approval of the head of the department in which he chooses his major work and of the Dean of the School.

Period of Study.—The *minimum* period of study required for securing the degree of Doctor of Philosophy is three years. The degree is conferred, how-

ever, not for residence during a certain period, but for scholarly attainments and power of investigation, as proved by thesis and examinations.

Candidates should note that credit is not given for work done in other universities, excepting in the sense that their residence at other institutions is counted towards the residence requirement for the doctor's degree.

At least the first two or the last one of the three years required must be spent at this University.

Examination.—Towards the end of his second year of study, or, by special permission, at the beginning of his third year, the candidate for the degree must submit to a preliminary examination conducted by the members of the faculty with whom he is doing his principal work, in order to determine whether he will be accepted as a candidate for the degree in the following year. This examination is partly oral, and may be wholly so. At this time, or before, the candidate will be required to demonstrate his ability to read French and German, and any other language needed for the prosecution of his work.

On or before the last Monday in May of the year in which the candidate expects to come up for his degree, he must submit to a final examination by a committee appointed by the Dean of the Graduate School. This examination will be partly written. The candidate will also have, however, an oral examination. These examinations will not be confined to the courses which the candidate has attended in the University of Illinois only, if he has done part of the work elsewhere; nor even to the field covered by the courses specifically taken in this or other universities; but will be so conducted as to determine whether the candidate has a satisfactory grasp of his major subject as a whole, and a general acquaintance with the fields of knowledge represented by his course of study.

Before the candidate is admitted to the final examination and the defense of his thesis, he may be required to take any other examination, oral or written, that is thought proper by the various departments in which he has studied. If after having passed his preliminary examination, he fails in the third year of his study to meet the expectations of the professors in charge of his work, or in any way fails to maintain the standard of scholarship and power of research expected of him, he may be refused admission to the final examination.

The final examination in the major and minor subjects may not be divided. The examination must be taken all at one time even though it requires several sessions.

Credit for work done in other universities is not "transferred." The candidate is examined here on the subjects offered by him for the advanced degree. However, his period of residence at another institution of proper grade will be accepted as fulfillment of the residence requirement of the University of Illinois so far as it goes.

Thesis.—The power of independent research must be shown by the production of a thesis on some topic connected with the major subject of study. The candidate is expected to defend his thesis or dissertation before the members of the faculty, or as many of them as may wish to question him about it, in connection with his final examination.

The subject of the thesis should be chosen not later than the end of the second year of study and must be submitted for formal approval by the faculty

not later than the first Monday of November of the year when the degree is expected. A typewritten copy of the complete thesis, on thesis paper, must be in the hands of the Dean not later than noon of the Saturday nearest the middle of May, for submission to the examining committee.

The doctor's thesis must be printed and one hundred copies deposited in the Library of the University not later than the first of June preceding the conferring of the degree. If it is not printed by the first of June, the student must deposit seventy-five dollars ($75) or a bond for that amount satisfactory to the Comptroller of the University and the Dean of the Graduate School. If a bond is accepted, it must be replaced at the end of one year with a cash deposit. At the end of two years, if the thesis has not then been printed by the student, the University will print such part of it as it deems best.

The cash deposit made by the student who does not print his thesis by the end of the second year after his degree is conferred becomes the property of the University, to be used for the general purpose of printing theses, and all graduate students who receive their degrees must agree at the time when the deposit is made that the University shall become the owner of this deposit for this purpose.

The title page of each thesis must bear the words, "Submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in—(here put the major subject), in the Graduate School of the University of Illinois." The title page must also contain the full name of the author, the full title of the thesis, the year of imprint, and, if a reprint, the title, volume, and statement of the pagination of the volume from which it is reprinted. Each thesis must have an appendix giving a short biography of the candidate, including the institutions he has attended, his degrees and honors, the titles of his publications, and such other matters as are pertinent.

SCHOLARSHIPS AND FELLOWSHIPS

A number of fellowships and scholarships have been established by the Trustees of the University. To first year graduate students of ability and promise there are open a number of scholarships with a stipend of $250 each and freedom from tuition, incidental, and laboratory fees. To second and third year graduate students, that is, those who have had one or two years of graduate study, there are open fellowships with a stipend varying from $300 to $500, with freedom from fees. The larger stipends are given only to students who are expected to take their degrees within the year. Each holder of a fellowship or scholarship must pay the matriculation fee of ten dollars, unless he holds a first degree from the University of Illinois, and also the diploma fee of five dollars on receiving his diploma.

Candidates for these scholarships and fellowships must be graduates of the University of Illinois, or of colleges or universities having equivalent requirements for bachelors' degrees.

Application must be made upon blanks to be obtained from the Dean of the Graduate School. These application forms should be addressed to the Dean of the Graduate School as early as possible in February of the academic year preceding that for which the fellowship is desired.

Persons appointed are required to send the Secretary of the Board of Trustees prompt notice of their acceptance or refusal; and to agree that, if

accepted, the appointment will not be resigned to take a similar one in any other institution during the year for which it is awarded.

Nominations to fellowships are made upon the grounds of worthiness of character, scholastic attainments, and promise of success in the principal line of study or research to which the candidate proposes to devote himself.

Scholarships and fellowships are good for one year, but may be renewed for a second or third year in special cases. An appointment as honorary fellow, without stipend, may be made as specified for paid fellowships in the case of any one who has shown distinguished merit in his work.

Research Fellowships in the Engineering Experiment Station

The Engineering Experiment Station is devoted entirely to research. Its purposes are the elevation of engineering education, and the study of problems of special importance to engineers and to manufacturing, railway, mining, and industrial interests.

Ten research fellowships have been established in the Engineering Experiment Station. These fellowships are open to graduates of approved technical schools and universities, both American and foreign. There is a stipend of $500 a year for each fellowship. Applicants to whom these fellowships are awarded are required to agree to hold them for two years, devoting a part of their time to the work of the Engineering Experiment Station. At the expiration of this period, if all requirements have been met, the degree of Master of Science will be conferred.

Application for these fellowships should be made to the Director of the Engineering Experiment Station not later than February first. Candidates must present with their applications full information concerning themselves, including any written or published papers or results of investigation.

THE GRADUATE CLUB

The Graduate Club is an unofficial organization of the graduate students and graduate faculty. Its purpose is to furnish an opportunity for those working in different departments to become acquainted with one another and thus counteract the tendency toward narrowness which intense specialization may sometimes induce.

THE ILLINOIS SURVEY

The Illinois Survey is a department of the Graduate School established in 1910 to conduct research in the history of the State of Illinois. The members of the staff, assisted by graduate students, are engaged in the production of scientific studies in Illinois history, and it is expected that the results of these labors will lay a solid basis for the interpretation of the State's past.

The following persons constitute the staff of the Survey for the year 1914-15: Clarence W. Alvord, Ph.D., Professor of History, Chairman; Ernest L. Bogart, Ph.D., Professor of Economics; John A. Fairlie, Ph.D., Professor of Political Science; Theodore C. Pease, Ph.D., Associate in History; Arthur C. Cole, Ph.D., Instructor in History; Yetta Scheftel, A.M., Research Assistant; Jacob A. Hofto, A.M., Research Assistant; Jessie J. Kile, A.M., Research Assistant.

THE LIBRARY SCHOOL

For a description of the *Library Building,* see page 55; for an account of the *libraries* themselves, see pages 62-63; for the *collection in library economy,* see page 62; for *fees,* see page 118.

GENERAL STATEMENT

The Library School offers a two years' course of instruction to students who wish to enter library work as a profession, and certain library courses to students in other schools and colleges of the University of Illinois who may wish to elect them as a part of their course of training. The instruction in the first or junior year covers the generally accepted methods and practises in library work; students who complete this year's work are prepared to accept positions in library service. In the second or senior year greater emphasis is placed upon historical and comparative methods of treatment; new subjects are introduced to give the student a broad outlook and a scholarly, technical, and administrative equipment for the more responsible positions.

One or two years' training will not take the place of years of experience, but they will make the student more adaptable and his general library service more intelligent. The time spent in actual practise, under supervision, amounts to about three and a half months, counting seven hours to a working day. Although stress is laid upon simplicity and economy, methods are taught to enable students to work in large libraries where bibliographic exactness is required. Emphasis is laid upon the extension of the activities of the public library, and upon the importance of cooperation between the library and the schools and other educational and social agencies.

A member of the senior class in any other school or college of the University may, with the approval of the Director of the Library School, elect any course for which he is prepared.

The school also offers to freshmen and sophomores a course on the use of the library and the ordinary reference books, which will help in general reading or study.

ENTRANCE REQUIREMENTS

Admission to the Library School is condition upon the presentation of credentials showing that the applicant holds a bachelor's degree in arts or science from the University of Illinois or has had other equivalent training.

Application blanks for admission may be secured from the Director of the School, and these, filled out, should be filed, together with such documentary material as the candidate may offer, showing qualifications for admission, not later than the registration days in September. It is to the candidate's interest to present the application and certificates early, in order that the question of admission may be settled before he comes to the University.

PROPOSED PRELIMINARY COURSE

Undergraduates who intend, on the completion of their college work, to apply for admission to the Library School, are requested to select their courses so as to conform in general to the following recommended program of studies preparatory to library work.

Proposed Preliminary Course

English literature, 5*; rhetoric, 2
Latin, 4, in addition to four years of high school Latin
German, 6, in addition to two years of high school German
French, 4, in addition to two years of high school French
Languages begun in college instead of in the high school should be continued for a longer period.
Medieval and modern European history, 3; history of England, 3; history of the United States, 3
Economics, 3; political science, 2; sociology, 3
Philosophy, 2; general psychology, 2
Zoology, 3; botany, 2; chemistry or physics, 3

The total of this work is 100 semester hours, leaving the equivalent of one year of a four-year course free for work in other subjects or for more work in the subjects named.

ADVANCED STANDING

College graduates who have had approved library experience or who have attended other library schools may be accorded advanced standing by securing credit for some of the courses required for graduation. After satisfying all entrance requirements and after matriculation, the applicant for advanced standing may secure such credit either by examination or by transfer of credits from another institution offering courses in library economy.

SPECIAL STUDENTS

It is the practise of this School to admit as special students only those mature persons who, though unable to meet the formal requirements for entrance, are substantially prepared for thoro and advanced work. Such persons must present evidence of possessing the requisite information and ability to pursue profitably, as special students, the chosen subjects, and some substitute for the regular requirement for entrance, such as approved library or teaching experience, or foreign travel. Preference will be given to those already engaged in library work, especially in Illinois, who may desire more adequate training in particular subjects.

LIBRARY VISITS AND FIELD WORK

Each year all the students in the School visit the libraries and certain of the book binderies, book stores, and printing establishments of either Chicago and vicinity or St. Louis and vicinity. During this visit, which occupies one week, the students are accompanied by a member of the faculty.

In order to assure a varied library experience, each student in the senior year is required to spend one month in an assigned public library, working, as far as practicable, under the same conditions as a member of the staff of that library.

*The figures after each subject indicate the minimum number of lecture or recitation hours a week which the student should devote to that subject throughout one college year.

SCHEDULE OF COURSE

The course is two years in length. For graduation a student must receive credit for all courses except those marked with an asterisk (*), which are elective. The degree of Bachelor of Library Science is conferred on a student who has completed the required work in the two years' course, and has received credit in courses amounting to 65 hours.

JUNIOR YEAR

FIRST SEMESTER	SECOND SEMESTER
2a[1] Reference work (3 hrs.)	2b[1] Reference work (3 hrs.)
3a Selection of books (2 hrs.)	3b Selection of books (2 hrs.)
4a Practise work, 4 hours per week (2 hrs.)	4b Practise work, 4 hours per week (2 hrs.)
16 Order, accession and shelf work (2 hrs.)	7 History of libraries (2 hrs.)
17 Classification and book numbers (3 hrs.)	19 Trade bibliography (1 hr.)
18 Cataloging (3 hrs.)	20 Loan department (1 hr.)
23a Library administration and current library literature (1 hr.)	21 Printing, binding, indexing (2 hrs.)
	22 Library extension (3 hrs.)
	23b Library administration and current library literature (1 hr.)

SENIOR YEAR

6a Subject bibliography (2 hrs.)	6b Subject bibliography (2 hrs.)
8 *Advanced reference work (2 hrs.)	9 Bookmaking (2 hrs.)
10a Practise work, 8 hours per week (4 hrs.)	10b Practise work, 8 hours per week (4 hrs.)
13a Public documents (2 hrs.)	13b *Public documents (2 hrs.)
15a Seminar (2 hrs.)	15b Seminar (2 hrs.)
24a Selection of books (2 hrs.)	24b Selection of books (2 hrs.)
26a Library administration (3 hrs.)	25 Advanced classification and cataloging (1 hr.)
27 Bibliographical institutions (1 hr.)	26b Library administration (3 hrs.)
	28 *Practise work in various departments of the library (1 to 4 hrs.)

LIBRARY CLUB

Any member of the Library School faculty or of the staff of the University Library and any student in the Library School may become a member. Six meetings are held each year to discuss professional questions, and for social purposes.

[1]The numbers refer to courses in the Description of Courses, page 261.

THE SCHOOL OF MUSIC

For *admission* to the School of Music, see the general statement of entrance requirements of the University, pages 69-91. For *fees,* see page 118. For the *faculty* of the School of Music and descriptions of the *courses* in Music, see under "Music" in the "Description of Courses," Part III.

GENERAL STATEMENT

The School of Music offers regular courses leading to the degree of Bachelor of Music, and a teacher's certificate in public school music.

Students who are not working for the degree in music may receive a statement from their instructors upon completing not less than one year of college work.

Classes in ear training meet twice each week. The fundamental principles of music notation are studied thoroly, and the ear is trained to recognize intervals, chords, etc., so that the student may eventually think music. Music students are required to attend these classes.

The sight-singing classes meet twice each week. This work is required of music students.

Choral, orchestral, and ensemble work is required of all students who are sufficiently advanced.

All students majoring in a practical subject are required to take Music 94 (Recital).

A series of lectures and recitals is given each year. Only artists of the best reputation appear. Music students are admitted free and are required to attend.

The instructors in the School of Music give recitals and lectures on musical subjects during the year.

The courses in the history of music and musical theory, as well as the work in the University Orchestra and the University Choral Society, may be taken by students in other departments without fee.

REQUIREMENTS FOR GRADUATION

Candidates for the degree of Bachelor of Music must offer credit for 130 semester hours, including the prescribed subjects named below, together with an acceptable thesis on a topic related to music.

FIRST YEAR

FIRST SEMESTER	S. H.	SECOND SEMESTER	S. H.
Music 3, Harmony	2	Music 4, Harmony	2
Music 42a, 52a, or 62a, Piano, Voice, or Violin	6	Music 42b, 52b, or 62b, Piano, Voice, or Violin	6
Music 21a, Ear Training		Music 21b, Ear Training	
*Rhet. 1, Rhetoric and Themes	3	Rhet. 2, Rhetoric and Themes	3
Foreign language, French, German, or Italian	4	Foreign language, French, German, or Italian	4
Phys. Tr. 7, Gymnasium (women)	1	Phys. Tr. 7, Gymnasium (women)	1
Phys. Tr. 9, Hygiene (women)	1	Phys. Tr. 1, Gymnasium (men)	1
Phys. Tr. 1, Gymnasium (men)	1	Mil. 2, Drill (men)	1
Phys. Tr. 1a, Hygiene (men)		Mil. 1, Drill Regulations (men)	1
Mil. 2, Drill (men)	1		
Total, Men	17	Total, Men	18
Total, Women	17	Total, women	16

*Those students who show by examination a proficiency in composition sufficient to qualify them for the second semester's work in Rhetoric 1 may be excused from the first semester's work. See page 75.

SECOND YEAR

FIRST SEMESTER	S. H.	SECOND SEMESTER	S. H.
Music 1, History of Music	2	Music 2, History of Music	2
Music 5, Advanced Harmony	3	Music 6, Advanced Harmony	3
Music 43a, 53a, or 63a, Piano, Voice, or Violin	6	Music 43b, 53b, or 63b, Piano, Voice, or Violin	6
Music 22a, Ear Training	1	Music 22b, Ear Training	1
Music 23a, Sight Singing		Music 23b, Sight Singing	
Foreign language, French, German, or Italian	4	Foreign language, French, German, or Italian	4
Mil. 2, Drill (men)	1	Mil. 2, Drill (men)	1
Total, Men	17	Total, Men	17
Total, Women	16	Total, Women	16

THIRD YEAR

Music 7, Counterpoint, Canon, and Fugue	3	Music 8, Counterpoint, Canon, and Fugue	3
Music 44a, 54a, or 64a, Piano, Voice, or Violin	6	Music 44b, 54b, or 64b, Piano, Voice, or Violin	6
Music 24a, Sight Singing	1	Music 24b, Sight Singing	1
Education 1, Principles	3	English 1, Survey of English Literature	4
English 1, Survey of English Literature	4	Total	14
Total	17		

FOURTH YEAR

Music 9, General Theory, Free Composition	2	Music 10, General Theory, Free Composition	2
Music 11, Acoustics	1	Music 12, Acoustics	
Music 45a, 55a, or 65a, Piano, Voice, or Violin	6	Music 45b, 55b, or 65b, Piano, Voice, or Violin	6
Music 46a, 56a, or 66a, Minor Subject	2	Music 46b, 56b, or 66b, Minor Subject	2
Music 94a, Recital	3	Music 94b, Recital	3
English 35, The English Drama	3	Total	14
Total	17		

In Addition, for Women: 3 hours elective, to make up the prescribed total of 130 hours. These three extra credits may be taken at any time; the election made must be approved by the student's adviser.

Practical Courses include regular attendance in Music 91 (Orchestra), Music 93 (Choral Society), and Music 27 (Ensemble Class), unless a student is excused by the Director of the School of Music.

COURSE IN PUBLIC SCHOOL MUSIC

The aim of the Course in Public School Music is to prepare competent teachers and supervisors of music for the public schools. Students completing the course are granted teachers' certificates. An opportunity for practise teaching is offered. The course is one year in length, and comprises the following prescribed subjects:

COURSE IN PUBLIC SCHOOL MUSIC

Music 1-2—History of Music	4 hours
Music 3-4—Harmony	4 hours
Music 21a-21b—Ear Training	2 hours
Music 23a-23b—Sight Singing	2 hours
Music 25—Methods of Teaching	8 hours
Practical Music, major, Piano or Voice	12 hours
Practical Music, minor, Voice or Piano	4 hours
	36 hours

Advanced students may satisfy a part of the foregoing requirements by examination; in no case, however, is a student permitted to take less than 30 hours of work.

MUSICAL ORGANIZATIONS

The University Choral and Orchestral Society is conducted by the Director of the School of Music, with the assistance of the instructor of violin, and gives a series of concerts throughout the year. The orchestra meets for two hours' rehearsal once a week; it is open to all students who qualify for membership. The chorus meets once a week for rehearsal of choral works. Singers not connected with the University are admitted by examination.

The Military Band is conducted by the instructor in band instruments. Besides giving several concerts during the year, it furnishes music for regimental formations and ceremonies and other occasions as required by the President of the University. Membership is decided by competitive examinations. A Second Band is also conducted, in order that all students who play band instruments ordinarily well may have an opportunity to play in a band. Each full term of service in the Band counts for one term of the required work in Military Science. After obtaining credit for four semesters' work those who are continued in the Band for not less than one year are paid an amount equal to the incidental fees for the year.

THE SCHOOL OF EDUCATION

GENERAL STATEMENT

The School of Education was established in 1905 as an organization of the various activities of the University which are concerned with the professional preparation of teachers and supervisors for the public schools. The nucleus of the School is the department of education in the College of Liberal Arts and Sciences. The faculty of the School is made up of the members of this department and of other departments who offer courses intended for the preparation of high-school teachers. The Board of Trustees has approved plans for a building to be used as a laboratory for the School of Education and to include quarters for a training school of secondary grade, and has purchased a site upon which the first wing of this building will be erected.

THE DEPARTMENT OF EDUCATION

The Department of Education includes four full professors, an associate professor, and several assistants. It offers courses in educational history, theory, and practise—see under Education in the General Description of Courses, Part III. Two of the courses (Education 1 and 10) are required of all students who wish to secure the official recommendation of the University for teaching positions in secondary schools—see "Committee on Appointment of Teachers," page 202. Credits earned in these courses are usually accepted by county superintendents in lieu of examinations in pedagogy for county teachers' certificates; and these and other courses serve to prepare candidates for the examinations in professional subjects required for the State supervisory and high-school certificates —see "Certification of High School Teachers in Illinois," page 203.

GRADUATE WORK IN EDUCATION

Graduate work in education is offered to qualified students in the following fields: general educational theory (Professor Bagley); educational administration and supervision and elementary education (Professor Coffman); secondary, vocational, and higher education (Professor Johnston); educational psychology, including mental tests and clinical psychology, health administration, and school hygiene (Professor Whipple).

The equipment of the department for graduate work comprises: (a) A library of some 20,000 volumes (besides pamphlets), including the Aron Library of 8,000 titles relating largely to European education in the sixteenth, seventeenth, and eighteenth centuries; a collection of documents representing educational development in the United States, including school reports and courses of study of state and city systems, and a text-book library representing the development of elementary and secondary school texts used in American schools

from the beginning of the nineteenth century; (b) an educational museum, containing exhibits of school furniture, apparatus, and illustrative material and representative work of pupils; (c) a laboratory of educational and clinical psychology equipped for mental and physical tests.

PUBLICATIONS OF THE SCHOOL OF EDUCATION

The School of Education publishes a series of bulletins comprising (a) reports of the annual High School Conference, the Conferences on Teachers' Institutes, and other meetings and conferences regarding public education held at the University, and (b) reports of investigations and studies by members of the instructional staff and students in the department.

The department of education is unofficially related through the editorial work of its members to the following journals: *The Journal of Educational Psychology* (Baltimore), edited by J. C. Bell, W. C. Bagley, C. E. Seashore, and G. M. Whipple; *Educational Administration* (Baltimore), edited by C. H. Johnson, L. D. Coffman, and David Snedden; *The Illinois Teacher* (Official Journal of the Illinois State Teachers' Association), edited by L. D. Coffman; *School and Home Education* (Bloomington, Illinois), edited by W. C. Bagley.

COMMITTEE ON APPOINTMENT OF TEACHERS

The Committee on Appointment of Teachers recommends qualified graduates of the University for positions as teachers or supervisors in public schools, colleges, and technical schools in response to requests from the school authorities. The Director of the School of Education is chairman of the Committee, and the Secretary of the School is its chief executive officer.

The recommendations of the Committee are made under the following regulations, which were adopted by the University Senate on June 3, 1912:

1. The University Committee on Appointments is authorized to issue its recommendation, signed by the committee as the agent of the University, in all cases in which it is satisfied with the student's scholarship and ability to teach. The Committee shall regard the scholarship requirements as met if, in addition to carrying the professional courses mentioned in the next paragraph, the student has passed with an average grade of 85 in the courses necessary to constitute a major in the principal subject which he wishes to teach, and in courses aggregating a minimum varying from six to twelve semester hours (according to subject, and at the discretion of the Committee) in each of the other subjects for which he wishes to be recommended. The Committee shall, however, in each case secure the written opinion of the departments concerned in regard to the scholarship of the applicant, and shall view the evidence of scholarship as shown by the records in the light of this opinion; and if there appear to the Committee to be reasons which from their nature cannot be shown by mere records for questioning the scholastic ability of the student, the Committee may in its discretion withhold the recommendation.

2. A candidate must have successfully completed the following courses in the department of education:

a. An introductory course which shall aim (1) to acquaint the prospective teacher with the public-school system as it exists today in the United States, and (2) to present a brief outline of the principles of education. (A four-hour course.)

b. A course in the technique of teaching, accompanied by observation of class-room work in secondary schools, and including a discussion of class-management (routine and discipline), the elements of school hygiene, and the types of school exercises. (A three-hour course.)

3. The Director of the School of Education may, in his discretion, excuse a candidate from the professional courses outlined above, (1) if the candidate is a normal-school graduate or has taken equivalent courses in a normal school or in another college or university; or (2) if the candidate has had at least one year of successful teaching experience. If, at the time of registration with the Committee on Appointments, the candidate has not completed one of the required courses, but is enrolled at that time in the course, a Committee recommendation may be given with the approval of the instructor in charge of the course.

The courses mentioned in Section 2 are (a) Education 1, Introduction to Education (4 hours), and (b) Education 10, Observation and Technique of Teaching (3 hours). Either course may be taken in either semester.

CERTIFICATION OF HIGH-SCHOOL TEACHERS IN ILLINOIS

A student who expects to teach in the Illinois high schools should bear in mind that all teachers must be duly certificated. County high-school certificates are granted upon examination by county superintendents, and State high-school certificates upon examination by the State Superintendent. For county high-school certificates issued without an examination the new certificating law makes the following provision:

"At the option of the county superintendent, a high school certificate may be issued without examination to graduates of a recognized normal school, college, or university, who present within three years after graduation, certified credits in English, pedagogy and six high school subjects (chosen from a list published by the Examining Board) and accompanied by faculty recommendations of ability to teach in the high school." (Section 6.)

The educational courses required for the official recommendation of the University, Education 1 and 10, are commonly accepted as meeting the requirement in pedagogy.

State high-school certificates are granted under the following conditions:

"A four-year high school certificate valid in any high school in the State, for which the requirements shall be: (1) Graduation from a recognized college or university, or the completion of an equivalent preparation. (2) three years' successful teaching, two of which shall have been in the State on a first grade, a high school, or a supervisory county certificate; (3) a successful examination in English, educational psychology, and the principles and methods of teaching, and (4) the preparation of a thesis on one or more secondary school problems, the subject or subjects of which shall be selected from a list prescribed by the Superintendent of Public Instruction.

"[Note—Candidates who have had three years of successful experience in teaching, two of which were in Illinois under a first grade certificate and have exchanged the same for a county high school certificate under the new law, meet the requirements of No. 2]" (Circular 72, State Department of Public Instruction.)

Education 1, 10, and 25 embody the materials usually covered by the State examinations in educational psychology and in methods of teaching.

CERTIFICATION OF SUPERINTENDENTS AND PRINICPALS

The following are the requirements for certification in supervisory work:

"A four-year supervisory certificate valid for supervisory work and for teaching in any district in the State. The requirements for this certificate shall be: (1) Graduation from a recognized high school and from a recognized normal school, or an equivalent preparation; (2) three years' successful supervision, two of which shall have been in this State on a county supervisory certificate; (3) a successful examination in English, educational psychology, sociology, the history of education, and school organization, administration, and supervision, and (4) the preparation of a thesis on one or more problems of school administration, the subject or subjects of which shall be selected from a list prescribed by the Superintendent of Public Instruction.

"[Note—Candidates who have had three years of successful experience in teaching, two of which were in Illinois under a first grade certificate, and have exchanged the same for a county supervisory certificate under the new law, meet the requirements of No. 2.]"

Life Certificates

"At the time of its expiration upon evidence of successful teaching or supervision satisfactory to the Superintendent of Public Instruction, any four-year State certificate enumerated in this Act shall become valid and be endorsed for life. The validity of State certificates now in force and those issued in accordance with this Act, shall be conditioned upon the good behavior of the holder." (Circular 72, State Department of Public Instruction.)

Education 1, 2, 4, 16, 20, 25 embody the material usually covered by the examination (except in English) for the State supervisory certificate.

REQUIREMENTS OF THE NORTH CENTRAL ASSOCIATION

Students who anticipate teaching in high schools accredited to the North Central Association of Colleges and Secondary Schools should complete courses in education aggregating at least eleven semester hours. This requirement of the Association is effective for new teachers after 1915, but is not retroactive. Certain work offered outside the department of education, especially "teachers' courses," may be counted as part of the eleven-hour minimum.

THE SCHOOL OF RAILWAY ENGINEERING AND ADMINISTRATION

GENERAL STATEMENT

The School of Railway Engineering and Administration has been established to prepare men broadly for the technical and administrative departments of railroads. The work offered is arranged in five different courses, any one of which is designed to occupy four years' time. The courses are:

Railway Civil Engineering
Railway Mechanical Engineering
Railway Electrical Engineering
Railway Transportation
Railway Traffic and Accounting

The first three of these courses are administered by the College of Engineering, and a description of them appears with that of other courses offered by this College. Students are admitted to them under the same conditions as to other courses of the College of Engineering, and they have available for their use all of the library, drafting-room, and laboratory facilities which constitute the equipment of this College. The last two courses are administered by the College of Liberal Arts and Sciences; they are described in detail in connection with the other courses of this College. Students are admitted to them under the same conditions as to other courses of the College of Liberal Arts and Sciences.

It is the purpose of each of these courses to add to the broad foundation of discipline and training which should be supplied by every college course such specialized training as will be most useful to those who look forward to careers in railway service.

MILITARY SCIENCE

The military instruction is under the charge of an officer of the United States Army. The course as a whole has special reference to the duties of officers of the line. A full supply of arms and ammunition is furnished by the War Department, including 1,500 U. S. magazine rifles (model 1898) and accouterments, two field pieces of artillery, and full equipment for a signal corps and a hospital corps.

Every male student under twenty-five years of age, able to perform military duty, and not excused for sufficient cause, is required to drill twice each week until he has gained credit for four semester hours. He is also required to study drill regulations for infantry, and to recite upon the text once a week until he gains credit for one semester hour.

The practical instruction begins as soon as possible after a student enters the University. The standings in study and drill are placed on record with other class credits; one semester of recitations and drill counts two hours, and the three remaining semesters of drill three hours. This work is required for graduation in all the undergraduate colleges of the University.

The Cadet Brigade consists of the First Regiment, three battalions of four companies each, commanded by a Cadet Colonel; the Second Regiment, two battalions of four companies each, commanded by a Cadet Lieutenant Colonel. The non-commissioned officers are selected from the sophomore class, the lieutenants from the junior class, and the field officers and captains from the senior class. There are 2,000 cadets and 90 commissioned officers in the brigade.

Artillery and signal detachments are organized mainly from those students of the second year or sophomore class who have made more than an average standing in the work of the previous year.

A special military scholarship, good for one year, is open to each student who attains the grade of a commissioned officer; its value is paid to the holder at the close of the year. Appointments in the regiment are made on the nomination of the commandant of cadets confirmed by the Council of Administration.

Towards the close of the year a committee appointed by the President of the University examines candidates for nomination to the Governor of the State to receive commissions as brevet captains in the State militia. Candidates must be members of the senior class in full standing at the time of this examination; must have completed the course of military studies; must have served two semesters as commissioned officers; and must be approved by the Council of Administration as having good reputation as scholars, officers, and gentlemen.

The uniform is of cadet gray, the coat trimmed with black mohair braid, the trousers with black cloth stripe, cut after the U. S. Army pattern. During warm weather a blue flannel shirt is worn instead of the coat. In order that all uniforms worn at the University may be, in quality, make, and finish, in strict accordance with the specifications adopted by the Board of Trustees, all students enrolled in the military department are required to obtain them from that firm

only that may, for the time being, be under agreement and bond with the Trustees to furnish said uniforms at a stated price and of standard quality.

The University military band is composed of students, and every full term of service therein is counted as one term of drill. Those who play in the band after having earned their five military credits necessary for graduation have their incidental fees remitted at the end of each year. Besides giving several concerts during the year, the band furnishes music for regimental formations and ceremonies and other occasions as required by the President of the University. Membership is decided by competitive examination.

PHYSICAL TRAINING

FOR MEN

The object of the work in this department is to preserve and improve the bodily health of the students by rational exercises and to teach proper intercollegiate sports. Physical training is compulsory for all freshmen. Regular classes are formed in swimming and fencing and for drill on the various gymnasium appliances. Lectures are given on personal hygiene.

All competitive athletic games are under the direct supervision of the Director of Physical Training, and an examination is required to show that membership on any team will not cause injury, but will tend to improve the physical condition. No student whose class work is unsatisfactory is allowed to play on a University team.

For a description of the Men's Gymnasium, see page 55.

FOR WOMEN

The object of the work of this department is to preserve and improve the general health, carriage, and co-ordination of the young women of the University. Each student is given a physical examination; suitable exercise is prescribed and advice given.

The class work embraces corrective, hygienic, and recreative exercise, including free and light gymnastics, marching, simple steps, games, and Maypole. Tennis, hockey, basket-ball, volley-ball, German-ball, and quoits are played in season.

The gymnasium is open at certain hours and under suitable restrictions to all women of the University. The uniform consists of black serge bloomers, white cotton blouse, black tie, and gymnasium shoes.

The swimming pool is open daily, except Saturday, from 10 to 12 a. m., and from 2 to 5:30 p. m. The regulation swimming suit of one piece must be made of cotton jersey or other cotton material.

For a description of the Women's Gymnasium, see under Woman's Building, page 55.

THE SUMMER SESSION

EDMUND JANES JAMES, Ph.D., LL.D., PRESIDENT OF THE UNIVERSITY
WILLIAM CHANDLER BAGLEY, Ph.D., *Director of the School of Education, and Director of the Summer Session*

STAFF OF INSTRUCTION—1914

LEWIS FLINT ANDERSON, Ph.D., *Assistant Professor of Education*
WILLIAM CHANDLER BAGLEY, Ph.D., *Professor of Education*
CLARENCE WILLIAM BALKE, Ph.D., *Professor of Inorganic Chemistry*
FREDERICK CHARLES BAUER, B.S., *Associate in Soil Fertility*
FRANKLIN DAVIS BARKER, Ph.D., *Professor of Zoology, University of Nebraska*
PHILIP STEPHAN BARTO, A.M., *Instructor in German*
HERBERT JEWETT BARTON, A.M., *Professor of Latin Language and Literature*
GEORGE DENTON BEAL, Ph.D., *Instructor in Chemistry*
ADELINE BRAINARD, *Assistant in Music*
VERNA BROOKS, A.B., *Instructor in Physical Training for Women*
WALTER BUCHEN, A.M., *Assistant in English*
HOWARD VERNON CANTER, Ph.D., *Assistant Professor of Classics*
FRANK TRACY CARLTON, Ph.D., *Professor of Economics, Albion College, Mich.*
CHARLES SEROPHIN CARRY, *Assistant in Romance Language*
SIDNEY CASNER, *Assistant in Physical Training*
LOTUS DELTA COFFMAN, Ph.D., *Professor of Education*
LANE COOPER, Ph.D., *Assistant Professor of English, Cornell University*
HERBERT LE SOURD CREEK, Ph.D., *Instructor in English*
SUMNER WEBSTER CUSHING, S.B., A.M., *State Normal School, Salem, Massachusetts*
CLARENCE GEORGE DERICK, Ph.D., *Assistant Professor of Chemistry*
DANIEL KILHAM DODGE, Ph.D., *Professor of English Language and Literature*
NEWTON EDWARD ENSIGN, A.B., B.S., *Instructor in Theoretical and Applied Mechanics*
GEORGIA FLEMING, B.S., *Instructor in Textiles*
JUSTUS WATSON FOLSOM, D.Sc., *Assistant Professor of Entomology*
JOHN JOSEPH GARDNER, B.S., *Instructor in Pomology*
HARRY LOVERING GILL, *Instructor in Track Athletics*
HARRISON FREDERICK GONNERMAN, M.S., *Instructor in Theoretical and Applied Mechanics*
GUSTAVE ADOLPH GROSS, *Instructor in Woodworking*
THACHER HOWLAND GUILD, A.M., *Associate in English*
STELLA MARY HAGUE, Ph.D., *Instructor in Botany*
ALFRED LAWRENCE HALL-QUEST, A.M., *Assistant in Education*
CHARLES LEROY HARLAN, A.B., *Assistant in Education*
GEORGE WILLIAM HEITKAMP, A.B., *Assistant in Physiography*
FELIX EMIL HELD, Ph.D., *Assistant in German*
MARY HILL, *Assistant in Art and Design*

B Smith Hopkins, Ph.D., *Instructor in Chemistry*
George A Huff, *Director of Physical Training for Men*
Albert Woodward Jamison, M.S., *Associate in Agricultural Extension*
Charles Hughes Johnston, Ph.D., *Professor of Secondary Education*
Ralph R Jones, *Basket Ball Coach*
Harvey Herbert Jordan, B.S., *Instructor in General Engineering Drawing*
Oliver Kamm, B.S., *Assistant in Chemistry*
Aubrey John Kempner, Ph.D., *Instructor in Mathematics*
Armin Hajman Koller, Ph.D., *Instructor in German*
Otto Eduard Lessing, Ph.D., *Professor of German*
Simon Litman, Dr. Jur. Pub. et Rer. Cam., *Assistant Professor of Economics*
Ernest Barnes Lytle, Ph.D., *Associate in Mathematics*
Duncan Arthur MacInnes, Ph.D., *Instructor in Chemistry*
William Pitt Miller, B.S., *Assistant in Agriculture*
Wilford Stanton Miller, A.M., *Assistant in Education and Secretary of the School of Education*
Thomas Francis Moran, Ph.D., *Professor of History, Purdue University*
Jonas Bernard Nathanson, A.M., *Assistant in Physics*
Thomas Edward Oliver, Ph.D., *Professor of Romance Language*
Wales Harrison Packard, Ph.D., *Instructor in Zoology*
Joseph C Park, *Director of Industrial Education, Oswego, New York*
Maud Parsons, A.B., *Assistant in Household Science and Director of Lunch Room*
Harry Gilbert Paul, Ph.D., *Assistant Professor of English Language and Literature*
Alvah Peterson, B.S., *Assistant in Entomology*
Gustave Howard Radebaugh, *Instructor in Machine Work*
Louis W Rapeer, Ph.D., *New York Training School for Teachers*
Robert Kimball Richardson, Ph.D., *Professor of History in Beloit College*
Elmer Roberts, B.S., *Assistant in Agriculture*
William Spencer Robertson, Ph.D., *Assistant Professor of History*
Sidney Archie Rowland, A.B., *Assistant in Mathematics*
George Rutledge, A.B., *Research Assistant in Mathematics*
George Wallace Sears, M.S., *Assistant in Chemistry*
Fred B Seely, B.S., *Instructor in Theoretical and Applied Mechanics*
Constance Barlow Smith, *Assistant Professor of Music*
Orrin Harold Smith, A.B., A.M., *Assistant in Physics*
William Herschel Smith, M.S., *Instructor in Animal Husbandry*
Russel Story, A.M., *Instructor in Political Science*
Charles Manfred Thompson, Ph.D., *Instructor in Economic History*
Arthur Jerrold Tieje, Ph.D., *Instructor in English*
William Trelease, D.Sc., LL.D., *Professor of Botany and Head of Department*
Gustaf Eric Wahlin, Ph.D., *Associate in Mathematics*
Earle Horace Warner, A.B., *Assistant in Physics*
Floyd Rowe Watson, Ph.D., *Assistant Professor of Physics*
Ulysses Grant Weatherly, Ph.D., *Professor of Sociology, Indiana University*
Henry Charles Paul Weber, Ph.D., *Assistant Professor of Chemistry*
Anna Waller Williams, A.M., *Instructor in Household Science*
Elmer Howard Williams, Ph.D., *Associate in Physics*
Robert Carl Zuppke, *Foot Ball Coach*

GENERAL STATEMENT

The Summer Session of the University of Illinois for 1914 opened on June 22 and closed on August 14, making a term of *eight weeks*. The Summer Session of 1915 will open on June 21 and close on August 13.

All the courses extend through the eight weeks. Students who wish to remain for only six weeks may obtain from the Director of the Session a certificate of such attendance, but university credit will not be given for six-weeks courses.

Students may register for courses aggregating eight credit hours or less.

PURPOSE

The primary purpose of the Summer Session is to meet the needs of teachers in the public schools who wish to spend a part of the summer in study or investigation. The greater number of courses offered are designed for high-school teachers, supervising officers, and teachers of special subjects (art, music, manual training, domestic science, agriculture, etc.), and for college instructors, school supervisors, and principals who are working for advanced degrees. At the same time, students who may not fall within these groups are welcomed at the Session, and several courses of a more general nature are provided to meet their needs.

ADMISSION

Admission in regular status to courses in the Summer Session for which university credit is granted is limited to students who could be regularly admitted to the college of the University (Liberal Arts and Sciences, or Engineering, or Agriculture) in which they would be registered in the winter session.

In order to meet in full the entrance requirements for any one of these colleges, a student must obtain credit, either by passing entrance examinations, or by presenting certificates of work completed in accredited secondary schools or other recognized schools, for 15 units of high-school work, or the equivalent, in subjects accepted for admission to the University, including in the case of each college certain subjects especially prescribed for admission to that college. (See pages 69 to 91.)

Admission to courses which give university credit, *as special students, not candidates for a degree,* may be granted to persons 21 years of age, or over, subject to the general regulations of the University relating to special students.

Teachers who cannot meet the above conditions may be admitted to those courses which do not carry university credit.

REGISTRATION

Students will present themselves for registration on Monday, June 21, 1915.

FEES

A tuition fee of twelve dollars ($12) is required of all students in regular attendance at the Session. This entitles one to admission to regular courses and to all special lectures. An extra laboratory fee is charged in some courses for materials used. Any single course may be taken for a fee of six dollars ($6) and the laboratory fee, if there be one. A single course is understood to mean not more than two and one-half credit hours.

SCHOLARSHIPS

By ruling of the Board of Trustees of the University, all high school teachers in Illinois, and all other teachers in the State who are qualified to matriculate in the University as regular students, are entitled to Summer Session scholarships, exempting them from payment of the tuition fee. To matriculate regularly in the University, one must either pass the entrance examinations, or present a certificate from an accredited high school or other evidence of having completed the requisite amount of preparatory work.

By a more recent resolution of the Board of Trustees, the scholarship privilege is extended to persons graduated from the Illinois State Normal Schools during the academic year preceding the session in which the scolarship is desired, and to persons (otherwise qualified) who have not been teachers, but who are under contract to teach in the State during the coming year.

Application blanks for scholarships may be obtained by addressing the Director.

GRADUATE WORK IN THE SUMMER SESSION

During the past four years the Summer Session has placed increasing emphasis upon graduate courses leading to the master's degree. The various departments which are closely related to high school teaching and to educational administration have been selected as the centers of this emphasis. An attempt is made to vary the graduate offerings from year to year so that advanced students each year may find acceptable work in their chosen fields.

The normal requirement for the master's degree is full work of graduate grade, satisfactorily completed, through one year of residence. This means a residence of thirty-six weeks at the University. Qualified graduate students may fulfill this residence requirement in four summer sessions of eight weeks each and an additional four weeks' study at the University under the direction of the person in charge of the major work. Thus a student, by working at the University for one week before or after each session under the direction of the professor in charge of his major subject, may earn the master's degree in four summers.

In certain cases it will be possible for the graduate student to complete the last fourth of his residence requirement under a leave of absence. This privilege may be granted in the event that the student is able to take advantage of opportunities for research and investigation that are not afforded in the University community. Superintendents, principals, and class-room teachers frequently find it possible to carry on investigations in connection with their school work. There are, for example, numerous problems of school administration and of teaching for which the public school itself forms the only available "laboratory." Where the investigation of such problems is prosecuted with the co-operation of a department of the University, it may be possible to count the work toward the master's degree.

SUMMER COURSES IN LIBRARY TRAINING

Beginning Monday, June 22, 1914, and continuing for six weeks, the Library School conducted a Summer Session *to which were admitted only those actually employed as librarians, or library assistants, or teacher-librarians, or under definite appointment to serve in such positions.* The curriculum was planned to

meet especially the needs of workers in public libraries and in high school libraries of Illinois and no tuition fee was charged students entering from this State; students entering from libraries in other states paid a tuition fee of $12. The work was under the general direction of the faculty of the Library School, and the instruction was given by members of the faculty, supplemented by lectures by neighboring librarians. No university credit was given for the work as offered in 1914.

The work occupied the whole time of the student. The number of lectures in each subject was approximately as follows: Cataloging, 20; classification and book numbers, 13; book selection, 14; administration of small libraries, 10 reference work, 10; work with children, 10; loan systems, order, accession and shelf work, binding and repairing, 13.

The Library courses are not offered in connection with the Summer Session, but as an independent undertaking of the Library School.

PLAYGROUND WORK AND COACHING

In addition to the regular gymnasium work, special courses in coaching high school athletes were offered under the general direction of George A. Huff Director of Physical Training for Men. This work was added because of the increasing demand for trained men to direct high school athletics. A playground specialist was secured to direct the Summer Session work in this field and to offer instruction to superintendents, principals, and teachers who were interested in this movement. The playground work was supplemented by courses designed for those who wished instruction in directing playgrounds.

Courses were offered in baseball coaching (Mr. Huff), football coaching (Mr. Zuppke), basketball coaching (Mr. Jones), and track coaching (Mr. Gill). These courses were particularly adapted to high school teachers and principals who are engaged for part of their time in coaching athletic teams. The courses were so arranged that a student might, if he desired, devote his entire program to his work.

DESCRIPTION OF COURSES

For a description of the courses offered in the Summer Session, see the General Description of Courses, beginning on page 261.

THE COLLEGE OF LAW

For the *faculty* of the College of Law, see page 358; for the *course* in law, page 68; for *fees* and *expenses,* pages 118 and 122.

GENERAL STATEMENT

It is the aim of the College to furnish its students with such a training as will best fit them for the practise of the law. A mere knowledge of what the law is will not suffice. The student must learn the reasons which have made it what it is. These can be mastered only by studying the law in the light of its historical development. No special course is offered on the history of the law; but it is sought to present each subject so that the principles peculiar to it may be historically understood. It is also the aim of the College that the courses shall be so presented as to familiarize the student with legal methods of reasoning and to equip him with legal habits of thought. It is believed that the case method of instruction, properly understood and applied, is best adapted to accomplish these objects.

ADMISSION

The requirements for admission to the College of Law for the year 1915-16 and thereafter are as follows:

For admission as a regular student and candidate for the degree of Bachelor of Laws, an applicant must be matriculated and have 60 hours of credit in a college of this University; or have completed two full years of work as given at another college or university of recognized standing; or have received by transfer 60 hours of university credit here.

The faculty of the College of Law may, in its discretion, prescribe from time to time subjects which shall be required as part of the preliminary college work, subject to approval by the University Senate.

A student who is 21 years of age and is entitled to admission as a regular student to another college of this University, will be admitted as a special student in the College of Law. If he attains in the courses of the first year an average grade of 80 or over, he will be admitted to regular standing, and he may receive the degree of Bachelor of Laws if in all the courses he presents for the degree his average grade is 80 or more.

NOTE: The above is not intended to abrogate the present rule in regard to the admission of special students.

SPECIAL STUDENTS

Students twenty-one years of age, or over, who are not able to satisfy the regular requirements for admission, but who have had a preliminary education which would entitle them to take the Illinois State Bar Examination, may, by permission of the faculty, be admitted without examination as special students, but no such student may be a candidate for a degree. In exceptional cases, other persons may, by permission of the faculty, be admitted as special students.

No one may continue as a special student for more than two years except by special permission of the faculty, application for which should be made through the Dean.

ADVANCED STANDING

After matriculating, an applicant may obtain advanced standing (1) by transfer of credits from another accredited law school upon presentation of a certificate of honorable dismissal and a certified record of work done; or (2) by examination taken at the time of entrance to the College of Law in first year subjects only.

SUGGESTED PREPARATORY COURSE

The following schedule of studies is recommended by the faculty of the College of Law for students taking two years in the College of Liberal Arts and Sciences to meet the requirement for admission to the College of Law:

FIRST YEAR

FIRST SEMESTER	S. H.	SECOND SEMESTER	S. H.
Military, 2a	1	Military 1 and 2b	
Phys. Training 1 and 1a	1	Physical Training 2	
Rhetoric 1	3	Rhetoric 2	
Foreign language	4	Foreign language	
History 2a	3	History 2b	
Science	5	Mathematics 2	
Total	17	Total	

SECOND YEAR

Military 2c	1	Military 2d	
Science or foreign language	5 or 4	English 20	
Political Science 1	3	Political Science 3	
Economics 1	5	Economics 3	
History 4a	3	Philosophy 1	
		History 4b	
Total	17 or 16	Total	

The courses in military and physical training, Rhetoric 1-2, and eight hours in foreign language are required of freshmen in the College of Liberal Arts and Sciences. Latin is strongly urged for all students intending to study law; but those who have not had the necessary preparation for college courses in Latin should substitute a modern language, preferably French or German.

COMBINED COURSE IN LIBERAL ARTS AND SCIENCES AND LAW

By the proper selection of his studies it is possible for a prospective law student to take both the degree in arts and the degree in law in six years. (See page 141.)

INSTRUCTION

Courses in substantive law are taught by analyzing and comparing cases which have been carefully selected and arranged in case books. Reference, however, are constantly made to leading text books, and they are recommended and in certain courses required for collateral reading.

Courses in the law of procedure are taught from the leading text book supplemented by the examination of statutes and adjudged cases, and students are brought into as close touch as possible with actual practise, both by the method of instruction in these courses and by means of the Moot Court.

The instruction gives a thorough training in the common law, which constitutes a proper foundation for the practise of law in any state.

The faculty of the College is impressed with the idea that a state university should teach the law of the state which supports the school, and to that end, without neglecting the general principles that lie at the foundation of the common law, especial attention is given in all courses to grounding the student thoroly in the law as determined by the courts of Illinois. Throughout the entire course the students are required to consult frequently Illinois decisions and statutes, which are made the basis of discussion in class by students and instructor. In the Moot Court and through the course in Illinois procedure, especial attention is paid to the rules of pleading and practise that obtain in the State of Illinois.

MOOT COURT

The sessions of the Moot Court are held every Monday afternoon of the first semester for the third year class; every Tuesday afternoon of the first semester for the second year class; and every Monday afternoon of the second semester for the second and third year classes together. The Court is presided over by the Dean, who has had an experience of twenty-five years as a judge of the Circuit and Appellate Courts of Illinois. Attendance is compulsory with second and third year classes. It is the purpose to have the workings of the Moot Court parallel proceedings in the various courts of the State. Students are trained in the preparation of legal documents and in the trial of cases, both civil and criminal.

The Moot Court Bulletin is published every other week of the college year, and in this are printed the statements of cases, the briefs of opposing counsel, and the opinions of the presiding judge.

SPECIAL LECTURES

Addresses by prominent members of the bench and bar on practical features of the law are given from time to time during the year.

THE LAW LIBRARY

The Law Library contains 18,500 volumes, including all the reports of the courts of last resort of all the states; the United States Supreme, Circuit, and District Court reports; the English reports; the Irish reports; the Scotch Appeal cases; the Current Canadian and Australian reports, together with complete reports of several of the Canadian provinces; the statutes of the various states; digests of the state reports; several sets of special reports, such as the American Reports, American State Reports, American Decisions, Lawyers' Reports Annotated, and American Cases Annotated; complete National Reporter System; all the great Encyclopedias and Digests; and a carefully selected collection of text books and legal periodicals.

REQUIREMENTS FOR GRADUATION AND DEGREES

The degree of Bachelor of Laws will be granted to all regularly matriculated students who complete all the courses in the first year list; courses 8, 10, , 12a-12b, 18, 20, 35a-35b (second year); courses 4a, 15, 17, 19, 21, 22, 36a-36b, (third year); and enough of the other courses offered to make 84 hours of edit.

Degree of Doctor of Law

The degree of Doctor of Law (J. D.) will be granted to students who comply with the following conditions:

1. Complete the work required for the degree of Bachelor of Laws.
2. Secure a bachelor's degree in arts or science at least two academic years prior to the completion of the course for the degree of Bachelor of Laws.
3. Obtain a minimum average grade of 85 in the College of Law.
4. Present a thesis approved by the faculty of the College of Law, in accordance with the requirements hereinafter set out.

Students who receive the A.B. degree after registering in the College of Law, and, by counting courses in law toward both the degree of A.B. and the degree of LL.B., take both degrees in six years, must during the first year in the College of Law take four hours in history or the social sciences.

Rules Concerning Theses

The following are the rules concerning theses presented for the degree of Doctor of Law: 1. The thesis must be on a subject approved by the Dean of the College of Law after consultation with him as to the proposed method of treatment. 2. The subject of the thesis must be filed with the Secretary on or before December 20. 3. The thesis must be typewritten on paper 8½x11 inches, with at least one inch margin at the top, bottom, and sides. 4. It should contain not less than 4,000 nor more than 10,000 words. 5. In citing cases, names of parties, volume, page, and year should be given. Citations are not to be counted in determining the number of words. The student is expected to exhaust the cases decided during the period covered by his thesis, and to state the period for which the cases have been examined. 6. The thesis must be delivered to the Secretary of the faculty not later than May 1.

The thesis may then be returned to the writer for revision, or if unsatisfactory, it may be rejected altogether. If returned for revision it may be rejected after being revised. If accepted it will be filed in the Law Library, and may be published by the College of Law or by the University.

CERTIFICATE FOR ADMISSION TO THE ILLINOIS STATE BAR EXAMINATION

Any student although not a candidate for a law degree, if he has taken the following courses; 1a-1b, 2a-2b, 3, 4, 5, 6, 7, 8, 10, 11, 12a-12b, 18, 20, 35a-35b, 4a, 15, 17, 19, 21, 22, 31, 36a-36b, is entitled to a certificate thereof from the University, which certificate satisfies the requirements as to legal studies prescribed by the Supreme Court of the State of Illinois for admission to the bar.

COURSE LEADING TO THE DEGREE OF LL.B.

First Year

First Semester: Contracts (Law 1a); Torts (Law 2a); Criminal Law (Law 5); Personal Property (Law 6); Introduction to the Study of Law (Law 37).

Second Semester: Contracts (Law 1b); Torts (Law 2b); Real Property (Law 3); Common Law Pleading (Law 4); Domestic Relations (Law 7).

Second Year

First Semester: Real Property (Law 10); Agency (Law 11); Equity (Law 12a); Moot Court (Law 35a); Public International Law (Law 30); Sales (Law 9); Carriers (Law 14); Damages (Law 13).

Second Semester: Equity (Law 12b); Evidence (Law 8); Equity Pleading (Law 20); Moot Court (Law 35b); Quasi-Contracts (Law 32); Public Service Companies (Law 34).

Third Year

First Semester: Illinois Procedure (Law 4a); Bills and Notes (Law 15); Partnership (Law 19); Constitutional Law (a) (Law 22); Moot Court (Law 36a); Mortgages (Law 23); Municipal Corporations (Law 24).

Second Semester: Trusts (Law 16); Private Corporations (Law 17); Suretyship (Law 21); Constitutional Law (b) (Law 33); Moot Court (Law 36b); Conflict of Laws (Law 31); Bankruptcy (Law 25).

PRIVILEGES OF STUDENTS

The students of the College of Law may take, without extra fee, courses of study in other departments of the University, provided they secure the approval of the Dean of the College of Law. Especial attention is called to the courses in public speaking and debate, and to the courses in history, economics, and political science in the College of Libral Arts and Sciences and the Graduate School.

Law students are entitled to library privileges in the general library as well as in the law library, and possess in general all the rights and privileges enjoyed by other students of the University.

SCHOLARSHIP PRIZES

Eight scholarship prizes are open to matriculated students of the first and second years, to be awarded at the end of each year, four of $50 each and four of $25 each, available in discharge of tuition fees.

The American Law Book Company of New York offers an annual prize consisting of the Students' Edition of CYC, to be awarded to the member of the senior class making the best average during his senior year.

Callaghan & Company, Law Publishers, of Chicago, offer an annual prize consisting of the Cyclopedic Law Dictionary, to be awarded to the member of the second year class making the best average during that year.

THE COLLEGE OF MEDICINE

For the *faculty* of The College of Medicine, see page 32; for a description of the *building,* see page 56.

LOCATION

The College buildings are located in the city block lying between Harrison, Congress, Honore, and Lincoln streets, in Chicago.

CLINICAL FACILITIES

Dispensary

The Dispensary, which has been newly equipped during the past year, is divided into ten departments: medicine, pediatrics, orthopedics, laryngology, dermatology, ophthalmology, gynecology, neurology, and genito-urinary diseases. These departments occupy the first floor and part of the second floor of the college building. Connected with them are the Roentgen laboratory and the dispensary laboratory, which is devoted to experimental and research work. The average number of patients treated annually is twenty-three thousand.

Dispensary instruction is given in the third and fourth years; the subjects of medicine, surgery, orthopedics, laryngology, and genito-urinary diseases in the third year, and the subjects of pediatrics, dermatology, neurology, ophthalmoloy, and gynecology in the fourth year. The larger departments devote two hours and the smaller departments one hour daily to this work. Three weeks' service is given by each department in each semester, so that the student receives a total of thirty-six hours in the larger departments and eighteen hours in the smaller departments.

Amphitheater Clinics

More than 600 clinics besides the dispensary clinics are given each year. Practically all diseases seen in the temperate zone are demonstrated and all the operations of surgery are performed.

Fourth year students are required to examine and diagnose many cases and to assist in the operations.

Students are prohibited from doing work that interferes in *any* way with the fulfillment of the requirements of the curriculum. Unofficial clinical work may not be substituted for the official clinical requirements.

Hospital Clinics

The new West Side Hospital, containing 149 beds, five operating rooms, including a clinical amphitheater having a seating capacity of seventy-two, and a laboratory connected with the college by a corridor.

The University Hospital, corner Ogden avenue, Congress and Lincoln streets, opposite the College, contains 92 beds, two operating rooms, a laboratory, an X-ray department, and a clinical amphitheater of seventy-five seats.

These institutions are located near the College and certain clinical facilities, furnished by them, are open to its students.

Within half a block of the College is the Cook County Hospital, the chief free hospital in Chicago. During the past year it has cared for 30,000 patients. In this hospital is conducted much of the clinical instruction of the College. Medical appointments in this institution are made each year by the Civil Service Board. The internes, sixty-four in number, and externes are selected each spring by competitive examination. Only graduates of medical colleges of Cook County are eligible. The internes serve eighteen months and receive their board and laundry and have rooms in the hospital. They do surgical, medical, and obstetrical work.

In addition to Cook County Hospital there are more than sixty public and private hospitals in Chicago. Each hospital appoints from two to four internes annually.

The students of this College are required to attend the clinics of the Cook County Hospital during their third and fourth years. The hospital tickets cost $5.00 each, and are for sale at the office of the Warden. They admit the holders to all clinics and autopsies and to all public operations and lectures.

The County Morgue is located in the hospital grounds, and daily post-mortems are held by the pathologists of the hospital. Attendance is required during two years.

Members of the Faculty are connected with and give clinical instruction, to which students are admitted under certain conditions, in the following hospitals:

Cook County Hospital.
West Side Hospital
University Hospital
Augustana Hospital
St.Mary's Hospital
St. Luke's Hospital
Michael Reese Hospital
St. Joseph's Hospital
North Chicago Hospital

All students of the fourth year attend clinics in a number of the important hospitals in the city, in small groups every Wednesday forenoon during the year. Those members of the fourth year class who have maintained satisfactory records for scholarship and attendance, and who have taken the summer term, are selected to act as externes during the hours from 8 a. m. to 12 m. in a number of the best hospitals in the city during the entire year.

THE QUINE LIBRARY

The library of the College of Medicine, named in honor of Dr. William E. Quine, for many years the Dean of the College and now Professor of Medicine, *Emeritus,* occupies the east end of the second floor of the Medical Building. This library contains 14,000 bound volumes, besides pamphlets and reprints and files of 250 American, German, English, French, and Italian journals. It is open from 9 to 5 daily, except Sundays and legal holidays.

This collection of books and periodicals is in charge of a librarian who is constantly present to assist and instruct students in the use of a technical library.

ADMISSION

Applicants for admission to the College of Medicine for the collegiate year beginning September 1, 1914, and thereafter, must offer:

I. Four years' work in an accredited high school, or the equivalent, comprising fifteen (15) units* of secondary credit and including prescribed subjects as follows:

English	3 units
Algebra	1 unit
Plane geometry	1 unit
German, French, Latin, or Greek	2 units
American history and civics	1 unit
Electives	7 units
Total	15 units

II. Two years' work in a recognized college or university, comprising not less than sixty (60) semester hours† and including prescribed subjects as follows:

Physics	8 hours
Chemistry	8 hours
Biology	8 hours
German or French	6 hours
Electives	30 hours
Total	60 hours

Either the secondary or the collegiate requirements may be satisfied (a) *by certificate* or (b) *by examination.*

I. (a) Secondary credits will be accepted *by certificate* from the following sources:

(1) From high schools and academies in the State of Illinois which are accredited to the University of Illinois.

(2) From the state normal schools of Illinois and other normal schools having equal requirements for graduation.

(3) From schools accredited by the North Central Association of Colleges and Secondary Schools.

(4) From schools accredited to the state universities which are included in the membership of the North Central Association of Colleges and Secondary Schools.

(5) From schools approved by the New England College Entrance Certificate Board.

(b) Secondary credits may be made *by examination:*

(1) In the examinations conducted by the Registrar of the University of Illinois at the University in Urbana in January, July, and September of each year. For programs of these examinations, see pages 76 to 79.

(2) In the examinations conducted by the Registrar of the University of Illinois at the College of Medicine in September of each year. In 1915 these examinations will be held September 23 and 24. Programs may be had by applying to the Secretary of the College of Medicine, Congress and Honore Streets,

*A unit is the amount of work represented by the pursuit of one preparatory subject, with the equivalent of five forty-minute recitations a week, through 36 weeks; or, in other words, the work of 180 recitation periods of forty minutes each, or the equivalent in laboratory or other practise. In general, two hours in laboratory, shop, or drawing room are considered equivalent to one hour of recitation.

†A semester hour is a class period of one hour a week for one semester, or the equivalent in laboratory, shop, or drawing room.

Chicago. The subjects offered will be the same as those included in the list on pages 71 and 72. For a description of the ground covered in the several subjects see pages 85 to 91.

(3) In the examinations conducted in June of each year by the College Entrance Examination Board. See page 73.

(4) In the examinations conducted by the Regents of the University of the State of New York.

II. Collegiate credits will be accepted *by certificate* from recognized colleges which require for admission the completion of at least 14 units of high school work in an accredited high school, or the full equivalent thereof, and for graduation, in addition, four years of college work; or may be made *by examination* in the examinations conducted by the Registrar of the University of Illinois at the College of Medicine in September of each year. *Special arrangements must be made in advance with the Registrar for examinations in collegiate subjects.*

Students are strongly urged to acquire such an elementary knowledge of Latin as may be obtained in four or five years' work in school or college.

Students lacking the prescribed college work in any one of the sciences (physics, chemistry, or biology) who have had a full year's work in that science in an accredited high school may be admitted to courses in these subjects to be offered at the College of Medicine during the summer of 1915, which will be of assistance to them in preparing for examinations to remove these deficiencies.

It will be noted that a properly prepared student of good ability can complete the minimum prescriptions in collegiate work within two years and still have considerable time for the study of language, history, economics, psychology, etc.—all subjects of which it is eminently desirable that the future physician should know something.

The above represent the minimum requirements for admission to the College of Medicine. It is strongly urged that students shall have completed at least three years, or, if possible, four years, in a standard college before taking up the study of medicine.

ADMISSION AS SPECIAL STUDENTS

The general rule of the University will apply to the College of Medicine: Persons over twenty-one years of age, *not candidates for a degree,* may, on special approval of the dean, be admitted to classes for which they are prepared.

ADVANCED STANDING

The University will accept scholarship and time credits for work done in medical colleges having standards equal to those of the College of Medicine of the University of Illinois, in so far as this work coincides with or is the full equivalent of the courses prescribed by the University.

Students presenting credentials from such medical colleges will be exempt from examination in so far as the credentials cover the work of the year or years for which the applicant seeks to be credited. Every such student must present a letter of honorable dismissal from, and be eligible for promotion in, the college in which he has pursued his medical studies and must comply with the requirements for such promotion in the University of Illinois.

Entrance Requirements for Upper Classes

Candidates for admission to advanced standing must in all cases satisfy the entrance requirements which were met by the classes which they wish to enter as follows:

For the *sophomore* class, the present entrance requirements of the College as outlined above.

For the *junior* class, (1) 15 units of high school work, including English, 3 units; algebra, 1 unit; plane geometry, 1 unit; German, French, Latin or Greek, 2 units; American history and civics, 1 unit; physics, 1 unit; and electives, 6 units; and (2) one year—i. e., thirty semester hours—in liberal arts and sciences in a recognized college or university.

For the *senior* class, 15 units of high school work, including English, 3 units; algebra, 1 unit; plane geometry, 1 unit; German, French, Latin or Greek, 2 units; American history and civics, 1 unit; physics, 1 unit; and electives, 6 units.

REGISTRATION

Students are required to register in the office of the Secretary immediately upon the opening of the term for the work of that term, and credit will be allowed only in the branches in which the students are registered. Students are registered in the order in which their fees are paid. Registration of students closes October 7.

COLLEGIATE YEAR

The collegiate year of 1914-15 consists of a session of thirty-seven weeks, beginning October 1, 1914, and ending June 16, 1915. Each year is divided into two semesters of eighteen and nineteen weeks respectively. Attendance upon the full session is required in order to secure credit for a year's work, and attendance upon four full sessions is required for graduation.

FEES AND EXPENSES

Fees—	First Year	Second Year	Third Year	Fourth Year
Matriculation	$5.00	$5.00	$5.00	$5.00
General ticket	120.00	120.00	140.00	155.00
Laboratory	20.00	20.00	5.00	.....
	$145.00	$145.00	$150.00	$160.00

Note—Dissections, $5.00 per part. County Hospital ticket, $5.00. Maternity fee, Chicago Lying-In Hospital, $15.00.

No fees are charged regular students for special courses or quizzes. Under no circumstances are instructors, dispensary physicians, or professors allowed to receive a fee for instruction or service.

Fees charged special students are based on the amount of work taken.

Alumni are admitted, without charge, to all regular courses except in laboratory work in which a charge is made for material actually used.

The Board of Trustees reserve the right to change the fees at any time.

Microscopes

Each student is required to have an individual microscope. Provision has been made whereby the student can purchase a microscope at reduced rates or make payment in annual installments. If a student be unable to purchase a microscope the College will rent him one for his exclusive use at the rate of $2.50 or $4.00 a semester, the rate depending upon the equipment of the instrument.

Living Expenses

The expense of living in Chicago is less than in most other large cities. From twenty-five to thirty-five dollars a month may be regarded as adequate for ordinary living expenses, exclusive of books, clothing, railroad fare, and miscellaneous needs.

The expense for books varies between $15.00 and $25.00 a year. The instructors, at the beginning of each course, direct their students in regard to the purchase of text-books.

Scholarships

Through the generosity of the late Prof. R. L. Rea, a fund has been provided for four scholarships each year for indigent worthy students. These scholarships are awarded to the four students whose credentials and qualifications for the study of medicine entitle them to participate in the benefits of the Rea fund.

The students whose names follow received benefit under this scholarship during the session of 1913-14:

Arthur Davis.
Dimiter George Fournadjieff
Rose Sophia Houda
Walter L. Johnson.

The scholarships given by the Northwestern branch of the Woman's Foreign Missionary Society of the Methodist Episcopal Church were awarded in 1913-14 to Miss Beulah A. Cushman and Miss Anna Elizabeth Isham.

The scholarships given by the Woman's Congregational Board of Missions of the Interior were awarded in 1913-14 to Miss Marion A. Weightman and Miss Josephine Kennedy.

COURSES OFFERED

Students entering the four-year course as offered in the College of Medicine in 1914-15 and thereafter, offer two years of work in liberal arts and sciences for admission. Upon the completion of the first two years in the College of Medicine, the degree of Bachelor of Science will be conferred; and upon the completion of the four years in the College of Medicine, the degree of Doctor of Medicine will be conferred. The two years of work in arts and sciences required for admission to the College of Medicine may be taken in the College of Liberal Arts and Sciences at Urbana.

REQUIREMENTS FOR GRADUATION

1. Four full courses of instruction of not less than thirty-two weeks each, no two being in the same year, are required of every candidate for graduation.

2. The last course of instruction shall have been taken in this institution.
3. Acceptable evidence of good moral character must have been filed.
4. The candidate shall be at least twenty-one years old.
5. He shall have satisfactory credits and pass his final examinations in accordance with the rules of the Faculty.
6. All indebtedness to the college shall have been paid.

GENERAL PLAN OF INSTRUCTION

The curriculum required for graduation extends over four years. During the first two years the work is largely confined to the sciences fundamental to practical medicine, and the time of the student is largely devoted to laboratory work. During the first year this consists of work in anatomy, histology, embryology, physiology and chemistry. During the second year the study of anatomy, physiology, and physiological chemistry is continued, and in addition the student takes up therapeutics, pathology, and autopsies.

During the third and fourth years the time is devoted to practical medicine and surgery, and to clinical instruction.

Attendance upon clinics is required and students are graded upon and given credit for their work in the clinical courses just as they are for the work in the didactic and laboratory courses. The students of the third and fourth years are divided into sections for dispensary work, and have instruction in rotation in the various departments of practical medicine and surgery.

Optional Work

In addition to the required work, students may, with the permission of the Committee on Optional Courses take one or more optional courses. No credit will be allowed for this work.

RULES FOR PROMOTION

The passing grade in each subject is 70 per cent. A grade from 60 per cent to 70 per cent constitutes a condition and entitles the student to one re-examination in the subject. A mark below 60 per cent or the failure to remove a condition by re-examination constitutes a failure, and the subject must be repeated in course. A student who has any failure standing against him may not be advanced to the next year without the permission of the committee on promotion. Students who fail in the re-examination in subjects given in the first semester of the fourth year totaling more than 48 hours will not be permitted to go on with the work of the second semester, but must repeat the subjects the following year. No student may be a candidate for graduation who has conditions in more than 96 hours.

General examinations will be held in all subjects at the end of each semester. The examinations for the removal of conditions for students of the first three years will be held during the week preceding the opening of the next collegiate year. Re-examinations in subjects presented in the first semester of the fourth year will be held not later than two weeks from the end of that semester.

Certificates showing the credits earned, including the attendance record, are issued at the end of the college year.

DESCRIPTION OF COURSES

ANATOMY, HISTOLOGY, EMBRYOLOGY

ALBERT CHAUNCEY EYCLESHYMER, B.S., M.D., Ph.D., *Professor and Head of the Department*
FREDERICK BOGUE NOYES, A.B., D.D.S., *Professor of Dental Histology*
————————, *Associate Professor*
ROY LEE MOODIE, Ph.D., *Instructor*
ELMER S RIGGS, A.M., *Lecturer in Comparative Dental Anatomy*
THOMAS SMITH JONES, B.F.A., *Artist*
LOUIS N BOELIO, *Technician*

General Statement

The laboratories for gross anatomy occupy two floors in the Dental Building. They comprise two dissecting rooms and a number of smaller rooms for embalming, storing, and prosecting. The laboratory for histology and embryology and the offices and research laboratories, are on the third floor of the Medical Building. The equipment includes apparatus for embalming, sectioning, macerating, corroding, and digesting; microtomes, microscopes, paraffin ovens, drawing apparatus, chemicals, glassware and Grübler stains. A small museum contains special dissections, osteological preparations, and models; sets of histological, neurological, and embryological sides; charts, lantern slides, and other teaching accessories. The departmental library contains nearly all the standard texts and about 2,500 special monographs. All the English, German, and French anatomical journals are received. The Crerar library is readily accessible and makes it possible to consult practically the whole literature of anatomy, zoology, and biology.

The aims of the department are: to give the average student such training in the essentials of anatomy as is necessary to secure a foundation for his later clinical work; to aid the exceptional student and physician to obtain a special knowledge of certain restricted fields of anatomy as a foundation for specialization; to stimulate both students and physicians to contribute to medical science.

Required Courses—First Year

Embryology.—Ovogenesis and spermatogenesis, maturation, ovulation and its relation to menstruation, fertilization, segmentation, gastrulation, formation and significance of germinal layers; the formation of the foetal envelopes and the placenta; the beginnings of organs and systems of organs; congenital malformations and their causes. Lectures and recitations: 2; laboratory: 2 two-hour periods. *II (second half.)** Professor EYCLESHYMER and assistants

Cytology, Histology, and Microscopic Anatomy.—The simplest animal cells; modified cells, such as are found in blood and lymph, epithelial, connective, muscular, and nervous tissues and their relationships in the various organs of the body. Lectures and recitations: 3; laboratory: 3 three-hour periods. *I.*
Professor EYCLESHYMER and assistants

*The first and second semesters are indicated by the Roman numerals I and II, respectively. A portion of a semester is indicated by the words in parenthesis following the semester numeral. Unless otherwise specifically stated, the Arabic numerals indicate the number of one-hour periods a week in each subject.

Neurology.—The gross and microscopic anatomy of the brain, spinal cord, and organs of special sense. Lectures and recitations: 2; laboratory: 2 two-hour periods. *II (first half).* Professor EYCLESHYMER and assistants

Systematic Anatomy.—Dissection of the human body. For convenience, the body is subdivided into: (1) upper extremity and head and neck; (2) lower extremity and thorax and abdomen. (In order that there may be a correlated study of osteology each student is lent a set of bones for study at home.) Lectures and recitations: 3; laboratory: 2 three-hour periods. *I, II.* Drs. MOODIE, HEACOCK and assistants

Required Courses—Second Year

Topographical Anatomy.—The topography and relations of the various regions, systems and organs of the body. Lectures and recitations: 2; laboratory: 2 three-hour periods. *I.* Dr. MOODIE and assistants

APPLIED AND SURGICAL ANATOMY

(See Department of Surgery)

Optional and Graduate Courses

Microscopical Technics.—Methods of preparing objects for microscopical study; injecting blood vessels and lymphatics; maceration, digestion, and corrosion; decalcification, fixation of tissues, embedding, sectioning, staining, and mounting. Hours to be arranged. Mr. BOELIO

Medical Illustrating.—Drawing, including perspective; values and their adaptation in the representation of medical subjects; normal and pathological specimens, both gross and microscopic; media adapted for representing certain conditions and structures, and suited for special methods of reproduction, such as line work, half tone, and lithography. (Open to all who are interested in the making of medical illustrations for publications.) Hours to be arranged. Mr. JONES

Embryology and Histogenesis.—The structural changes in the principal tissues and their cellular elements during growth; changes in the structure of cells during senescence. Hours to be arranged. Professor EYCLESHYMER

Dissection Review.—The principal systems of the body. Demonstration, occasional lectures, and quizzes. (Open only to those who have completed at least the first half of the third year.) Dr. MOODIE

Courses Preparatory to Specialization

(Special Fee.)

A. The Eye.
B. The Ear.
C. Mouth, Nose, and Throat.
D. The Thorax and Abdomen.
E. The Genito-urinary System.
F. Pelvic Anatomy.
G. The Extremities, especially the joints and their mechanism.
H. The Brain and Spinal Cord.

Research.—Physicians who desire to do research and students who have had three years of university training are invited to begin research work in this department. A reading knowledge of French and German is essential.

Seminar.—Introductory and advanced work. Critical reviews of recent anatomical literature; preparation of bibliographies; preparation of scientific papers for publication. Presentation and discussion of the results of investigations, the most promising lines of research, and the trend of anatomical thought.

DERMATOLOGY

William Allen Pusey, A.M., M.D., *Professor and Head of the Department*
Frederick Gillette Harris, M.D., *Assistant Professor of Dermatology and Venereal Diseases*
Philip Frank Shaffner, M.D., *Instructor*

Required Courses—Fourth Year

Dermatology.—Didactic, illustrated. 2; *I* or *II*. Professor Pusey

Clinical Dermatology.—Given in Cook County Hospital. 1; *I* or *II*.
Assistant Professor Harris

Clinical Dermatology.—Given in the dispensary. Clinics of one hour daily throughout the year. 3; *I* or *II (six weeks)*.
Assistant Professor Harris, Dr. Shaffner

Optional Courses

Syphilis.—Advanced clinical course, limited to six students.
Assistant Professor Harris

Pathology and Bacteriology of the Skin.—Limited to six students.
Dr. Shaffner

EXPERIMENTAL MEDICINE

David John Davis, B.S., M.D., Ph.D., *Professor and Director of the Laboratories*
Josiah J Moore, B.S., M.D., *Associate, Experimental Medicine*
Stella May Gardner, M.D., *Assistant Professor, Microscopical and Clinical Diagnosis*
Mary Lincoln, M.D., *Assistant Professor, Microscopical and Clinical Diagnosis*

General Statement

The function of this department is to carry on research work in medical problems, especially in clinical medicine, and to conduct the courses in clinical diagnosis and the laboratory work of the dispensary.

Required Course—Second Year

Laboratory Diagnosis.—The microscopic, bacteriologic, and chemical examination of urine, blood, sputum, feces, stomach contents, exudates. 8; *one-half of I* or *II*.
Professor Davis, Assistant Professors Gardner and Lincoln, Dr. Moore

Required Course—Third Year

Laboratory Diagnosis.—8; *one-half of I* or *II*.
Assistant Professors Gardner and Lincoln

Optional Courses

Advanced Special Laboratory Methods.—Limited to a few specially qualified students. Hours to be arranged. Dr. Moore

Research.—Limited to qualified students. Professor Davis

HYGIENE AND MEDICAL JURISPRUDENCE

Adolph Gehrmann, M.D., *Professor and Head of the Department of Hygiene*
Elmer DeWitt Brothers, M.S., LL.B., *Lecturer, Medical Jurisprudence*
Matthew Mills, LL.B., *Alternate Lecturer, Medical Jurisprudence*

Required Course—Third Year

Public Hygiene.—General etiology, immunity, contagious diseases, epidemiology, and preventive medicine; the organization of health departments and the work of the different divisions of the same; vital statistics, factory and school inspection, sanitation, municipal sanitation, and public welfare. Visits to public institutions and plants where the actual operaton of the various phases of public health activities may be studied. Lectures. 2; *II;* laboratory and conference: 8 three-hour periods. Professor Gehrmann

Required Course—Third Year

Medical Jurisprudence.—Lectures: 1; *I* or *II.* Mr. Brothers

MEDICINE

Charles Spencer Williamson, B.S., M.D., *Professor, and Head of the Department*

Division of Internal Medicine

Charles Spencer Williamson, B.S., M.D., *Professor of Medicine*
Maurice Louis Goodkind, M.D., *Professor, Clinical Medicine*
Frederick Tice, M.D., *Professor, Diseases of the Chest and Clinical Medicine*
Joseph McIntyre Patton, M.D., *Professor, Clinical Medicine*
John Weatherson, C.E., M.D., *Assistant Professor, Medicine*
Edward Louis Heintz, Ph.G., M.D., *Assistant Professor, Medicine and Clinical Medicine*
Maurice Lewison, M.D., *Assistant Professor, Physical Diagnosis*
Robert William Morris, A.B., M.D., *Instructor, Medicine*
Waldemar Eberhardt, B.S., M.D., *Instructor, Medicine*
Edward F Fox, M.D., *Instructor, Medicine*
George J Lorch, Ph.G., M.D., *Instructor, Medicine*
Harry Jerome Smejkal, M.D., *Instructor, Medicine*
Lyndon Harris, M.D., *Instructor, Medicine*
F Raymond Crooks, M.D., *Instructor, Medicine*
John Eddy Haskell, A.B., M.D., *Instructor, Medicine*
Ernest Sisson Moore, Ph.B., M.D., *Instructor, Clinical Medicine*
Robert Mosser, M.D., *Instructor, Clinical Medicine*
Solomon Strouse, A.B., M.D., *Instructor, Clinical Medicine*

Frank Wright, M.D., *Instructor, Clinical Medicine*
Walter Bradford Metcalf, M.D., *Instructor, Clinical Medicine*
Franklin S. Wilson, M.D., *Instructor, Clinical Medicine*
Philip M Dale, M.D., *Instructor, Clinical Medicine*
Frank Chauvet, M.D., *Instructor, Physical Diagnosis*
Louis Rudolph, M.D., *Instructor, Physical Diagnosis*
Frank J. Jirka, M.D., *Assistant, Physical Diagnosis*

General Statement

The work of this department is given in the second, third, and fourth years. In the second year the work includes the study of physical diagnosis on the normal subject, and pathologic cases preparatory to the clinical work of the last two years. At the same time, the student takes a course in laboratory diagnosis. As a foundation for the practical clinical work in the dispensary given in the third and fourth years.

In the third year instruction is carried on by conferences and recitations and by clinics. The student obtains instruction in internal medicine, and sees appropriate clinical cases. The student comes into intimate contact with patients and examines them in the dispensary under supervision.

In the fourth year part of the instruction is given by means of lectures and group quizzes, continuing the work of the third year. A large part of the work, however, is clinical, and is given not only in the College, but in the Cook County, University, and Michael Reese hospitals. In addition practical work is given in the dispensary in the various medical specialties. The last six weeks of the second semester are given over to a review of internal medicine. Textbooks: Osler's *Modern Medicine;* Krause-Brugsch; Mohr and Stachelin.

Required Course—Second Year

Physical Diagnosis.—(a) Lectures. 1; *II.*
(b) Practical drill on the normal subjects. 1 two-hour period; *II.*
Assistant Professor Lewison, Drs. Chauvet and Rudolph

Required Courses—Third Year

Practise of Medicine.—Infectious diseases, except tuberculosis; the intoxications; diseases of metabolism and of the ductless glands. Conferences and recitations. 4; *I, II.*
Assistant Professor Heintz, Drs. Lorch, Smejkal, Crooks, Harris, and Haskell.

Medical Clinic.—Selected topics—in the amphitheatre of the Cook County Hospital. 1 two-hour period; *I* or *II.* Professor Williamson

Medical Clinic.—Material from the University Hospital dispensary. 1 two-hour period; *I* or *II.* Assistant Professor Heintz

Physical Diagnosis.—On account of the change in curriculum, a course in physical diagnosis similar to that of the second year is given in the third year. *I.*

Physical Diagnosis Clinic.—Given to small groups, using the patients in the tuberculosis wards of the Cook County Hospital. 1; *I.*
Assistant Professor Lewison, Dr. Chauvet

Medical Dispensary.—Practical work on out-patients. The rooms in which the course is conducted have been designed for this purpose and have

been newly equipped. Practically every disease of an ambulatory nature found in the temperate zone may be seen here. 3 two-hour periods; *I, II (three weeks).* Drs. Mosser, Moore, Metcalf, Wilson, and Dale

Required Courses—Fourth Year

Practise of Medicine.—First semester: Diseases of the alimentary tract, liver, pancreas, peritoneum, heart, and lungs. Second semester: The kidneys and the blood; review of selected subjects. Lectures illustrated by pathological specimens, charts, and lantern slides; conferences. 6; *I*—3; *II*.
Lectures, Professors Williamson and Tice; Conferences, Assistant Professor Weatherson, Drs. Morris, Eberhart, and Fox

Medical Dispensary Clinic.—Gastro-intestinal, cardio-vascular, and renal diseases; methods of diagnostic analysis; collateral reading. 1 two-hour period; *I* or *II*. Professor Williamson

Medical Clinic.—Given in the amphitheatre of the Cook County Hospital. 1 two-hour period; *I* or *II*. Professor Patton

Medical Clinic.—Given in the amphitheatre of the Cook County Hospital. 1 two-hour period; *I* or *II*. Professor Tice

Group Clinic.—Given at the Michael Reese Hospital. Four one-hour periods to each group. Professor Goodkind

Medical Seminar.—Work in co-operation with the departments of surgery and obstetrics. The student receives 48 hours' credit, 16 in each department, although the work done is in one department only. During the first semester, the groups meet only informally, and abstracts are prepared and submitted for criticism. During the second semester, each group is assigned one hour in which to present its work before the entire class.

Professor Williamson and assistants

Optional Course

Seminar in the Classics of Medicine.—Given if a minimum number of four students apply; more than eight can not be admitted. Hours to be arranged.
Professor Williamson

Division of Pediatrics

Julius Hays Hess, M.D., *Associate Professor, Pediatrics and Clinical Pediatrics*
Emanuel Oliver Benson, A.B., M.D., *Assistant Professor, Pediatrics and Clinical Pediatrics*
Wilbub Maynard French, M.D., *Instructor*
Edward Kent Armstrong, M.D., *Instructor*
Henry Eugene Irish, M.D., *Instructor*
Maurice L Blatt, M.D., *Instructor*
James J McCarty, Jr., A.B., M.D., *Instructor*
Jacob Carl Krafft, M.D., *Instructor*
Joseph Samuel Cohn, M.D., *Instructor*

General Statement

The work in pediatrics is given in the third and fourth years. So far as possible, individual instruction is given, the class being divided into small groups for clinical work.

Required Courses—Third Year

Pediatrics.—Nutrition and nutritional disturbances in infancy. Lectures. 1; *II.* Associate Professor Hess

Pediatrics.—Recitations. 1; *I.* Drs. Irish, Armstrong, McCarty, and Cohn

Pediatric Clinic.—Physical diagnosis and demonstration of cases. 1; *I* or *II.* Assistant Professor Benson and Dr. French

Required Courses—Fourth Year

Section Conference.—Michael Reese Hospital. 1 hour a week for four weeks. Associate Professor Hess

Section Conference.—University Hospital. 1 hour a week for four weeks. Dr. Irish

Section Conference.—Contagious diseases. Cook County Hospital. 1 hour a week for four weeks. Dr. Armstrong

Dispensary.—Three two-hour periods for six weeks. Drs. French, Blatt, McCarty, Cohn, and Kraft

Pediatric Clinic.—Cook County Hospital. 1 two-hour period; *I* or *II.* Associate Professor Hess

Division of Neurology

Lee Harrison Mettler, A.M., M.D., *Professor and Head of the Division of Neurology and Clinical Neurology*
Isador Bernard Diamond, M.D., *Instructor*
Carl J S Rydin, M.D., *Instructor*
Edward Franklin Leonard, M.D., *Instructor*

Required Courses—Fourth Year

Neurology.—Clinico-didactic lectures. Recitations on selected topics. Lectures, 1; *I, II.* Recitations, 1; *I, II.* Lectures, Professor Mettler; recitations, Drs. Diamond, Leonard, and Rydin

Clinical Neurology.—Dispensary instruction. 3 two-hour periods, three weeks; *I, II.* Drs. Diamond, Rydin, and Leonard

Optional Courses

Special lectures in neuropathology, electrotherapeutics, or other related subjects. Books recommended: for recitations, Potts' *Diseases of the Nervous System,* for collateral reading: Oppenheim or Strümpell. 4 one-hour periods. Professor Mettler

Division of Psychiatry

Oscar Augustus King, M.D., *Professor and Head of the Division of Psychiatry*
Haim I Davis, M.D., *Assistant Professor, Clinical Psychiatry*
Ulysses Grant Darling, M.D., *Assistant Professor, Psychiatry*
Meyer Solomon, M.D., *Instructor, Psychiatry*

Required Courses—Fourth Year

Psychiatry.—Lectures and quizzes. 1; *II.* Professor KING

Clinical Psychiatry.—Given in the detention wards of the Cook County Hospital. 1, eight weeks; *I, II.* Assistant Professor DAVIS

Division of Roentgenology

ADOLPH HARTUNG, M.D., *Instructor*
MAXIMILLIAN HUBENY, M.D., *Assistant*

Required Course—Fourth Year

Roentgenology.—Conferences and demonstrations.
Drs. HARTUNG and HUBENY

Division of History of Medicine

BERNARD JOHN CIGRAND, M.S., D.D.S., *Lecturer*

Optional Course —Fourth Year

History of Medicine.—Lectures. 1; *I* or *II.*

OBSTETRICS AND GYNECOLOGY

CHARLES SUMNER BACON, Ph.B., M.D., *Professor of Obstetrics, and Head of the Department*

Division of Obstetrics

CHARLES SUMNER BACON, Ph.B., M.D., *Professor, Obstetrics and Clinical Obstetrics*
RACHELLE S YARROS, M.D., *Associate Professor, Obstetrics and Clinical Obstetrics*
CECIL VON BACHELLE, M.S., M.D., *Assistant Professor, Obstetrics*
OTTO HERMAN ROHRLACK, Ph.G., M.D., *Assistant Professor, Obstetrics and Clinical Obstetrics*
RICHARD CHARLES STEFFAN, M. D., *Instructor*
JOHN WILLIAM BIRK, M.D., *Instructor*
ANNIE ESTHER BARRON, M.D., *Instructor*
CHARLES NEWBERGER, M.D., *Instructor*
EDWARD MARTIN HEACOCK, M.D., *Instructor*
FREDERICK HOWARD FALLS, A.B., M.D., *Instructor*
WALTER CHARLES HAMMOND, M.D., *Instructor*

General Statement

The equipment of this department consists of manikins, demonstration pelves, malformed pelves, and other pathological specimens, charts, obstetrical instruments, and prepared fetuses. The histology and pathology is given in connection with the research laboratory.

The clinical work is given in the University Hospital and the Chicago Lying-In Dispensary. Bedside and dispensary clinics are given in the University Hospital. Each student is also required to assist in the delivery of six parturients. Reports of cases kept by students form the basis of conference discussions. An amphitheater clinic is also given to the senior class.

Fourth year students are required to take two weeks in residence in the Chicago Lying-In Hospital and Dispensary.

Required Courses—Third Year

Anatomy and Histology of the Obstetrical Passages and Passenger.—4 periods of two hours each. Dr. FALLS

Physiology of Pregnancy, Labor, the Puerperium, and the New Born Infant.—Lectures and recitations. 2; *I, II.*

Associate Professor YARROS, Drs. BIRK, NEWBERGER, HEACOCK, HAMMOND, and FALLS

Bedside and Dispensary Clinic.—University Hospital. 6 one-hour periods a week for two weeks.

Professor BACON, Assistant Professor ROHRLACK, and Drs. BARRON and FALLS

Parturition Clinic.—University Hospital. Three cases.

Required Courses—Fourth Year

Pathological Anatomy and Histology.—Laboratory. 2 to 4 two-hour periods in combination with the course on the pathology of the genital tract. (See division of gynecology.) Dr. FALLS

Pathology of Pregnancy, Labor, and the Puerperium.—Lectures and recitations. 48 hours in one-hour and two-hour periods.

Professor BACON, Assistant Professor ROHRLACK, and Drs. BIRK, NEWBERGER, HEACOCK, HAMMOND, and FALLS

Manikin Work.—8 two-hour periods.

Assistant Professor BACHELLE and Dr. STEFFEN

Bedside and Dispensary Clinic.—Given at the University Hospital. 6 one-hour periods a week for two weeks..

Professor BACON, Assistant Professor ROHRLACK, and Drs. BARRON and FALLS

Amphitheatre Clinic.—Given at the University Hospital. 1; *I* or *II.*

Professor BACON

Parturition Clinic.—Given at the University Hospital. Three cases.

Chicago Lying-In Hospital and Dispensary.—Residence, two weeks; at least six cases. (Fee, $15.)

Obstetrical Seminar.—Work in co-operation with the departments of medicine and surgery. For this work the student receives 48 hours credit, 16 in each department, although the work is in one department only. During the first semester, the groups meet only informally, and abstracts will be prepared and submitted for criticism. During the second semester each group is assigned one hour in which to present its work before the class.

Professor BACON and assistants

Optional Courses

Obstetrical Pathology.—Third or fourth year.

Division of Gynecology

CHANNING WHITNEY BARRETT, M.D., *Professor, Gynecology and Clinical Gynecology*

MARY GILRUTH MCEWENS, B.S., M.D., *Assistant Professor, Clinical Gynecology*

John Michael Lang, M.D., *Assistant Professor, Clinical Gynecology*
Irving Herbert Eddy, M.D., *Instructor*
Egan Walter Fischmann, M.D., *Instructor*
Clara Pauline Seippel, M.D., *Instructor*
Wesley John Woolston, M.D., *Instructor*
Albert John Schoenberg, M.D., *Instructor*
Mary Blanche White, M.D., *Instructor*
Pauline Rose Kapsa, M.D., *Instructor*
Frank Lee Stone, M.D., *Assistant*
Mathilda Osborne Lichner, B.S., M.D., *Assistant*

Required Courses—Fourth Year

Gynecology.—Recitations, lantern slide demonstrations, exhibition of fresh and preserved pathologic tissue, and illustrations by means of charts and models. An occasional hour is devoted to operative work. 2; *I.*
Professor Barrett, Drs. McEwen, Lang, Eddy, Fischmann, Woolston, Schoenberg and Stone.

Diagnostic and Operative Clinic.—Cook County Hospital. Typical and atypical cases and the diagnosis, prognosis and treatment of the same. Cases preliminary to operation; post-operative progress; pathologic tissues. 1 two-hour period; *I* or *II.* Professor Barrett

Diagnostic and Operative Clinic.—The College Amphitheatre or West Side Hospital. Material from the College and Marcy Center dispensaries is available for bedside study of the post-operative course. 1 two-hour period, 8 weeks; *I, II.*
Professor Barrett and Assistant Professors McEwen and Lang

Dispensary Clinics.—College and Marcy Center Dispensaries. Examinations, study of cases, and written reports. 3, six weeks; *I, II.*
Assistant Professor Lang, Drs. Fischmann, Woolston, Kapsa, White, Stone, and Lichner

Gross and Microscopic Study of Pathology of the Genital Tract.—Gross and microscopical specimens; conferences in connection with the Research Laboratory. 2 to 4 two-hour periods, in combination with the course on pathological anatomy and histology. (See division of obstetrics.)
Drs. Fischmann and Stone

Optional Courses

Gynecologic Pathology.—Special courses for students of demonstrated proficiency. Special investigation. Professor Barrett and assistants

OPHTHALMOLOGY

Casey Albert Wood, A.M., M.D., *Professor of Ophthalmology and Head of Department*
William Elliott Gamble, B.S., M.D., *Associate Professor of Clinical Ophthalmology*
Jonathan Brown Loring, M.D., *Assistant Professor, Clinical Ophthalmology*
Ephraim Kirkpatrick Findlay, M.D., *Assistant Clinical Professor, Ophthalmology*

WILLIAM BUTLER WEST, M.D., *Instructor*
CHARLES CLAYTON CLEMENT, M.D., *Instructor*
FREDERICK DOUGLAS VREELAND, M.D., *Instructor*
LAWRENCE WELLS WHITMER, M.D., *Assistant*
GEORGIANA DVORAK-THEOBALD, M.D., *Assistant, Clinical Ophthalmology*
EDWARD F SLAVIK, M.D., *Assistant, Clinical Ophthalmology*

Required Courses—Fourth Year

Didactic Ophthalmology.—Lectures, dispensary teaching, and clinical lectures in the hospital. Illustrated lectures and meetings of the Journal Club. 1, twelve weeks; *I.* Professor WOOD

Clinical Ophthalmology.—The common diseases of the eye, and such minor operations as the general practitioner may be expected to perform. 1; *I* or *II.* Professor WOOD, Associate Professor GAMBLE and assistants

Dispensary Instruction.—Diagnosis and treatment of the commoner diseases of the eye. 3 two-hour periods, six weeks.
Professor WOOD, Assistant Professors LORING and FINDLAY and instructors

Optional Courses

Properly qualified students can arrange for special or advanced work in ophthalmology by applying to Professor Wood. Books required: Wood and Loring, *Commoner Diseases of the Eye;* deSchweinitz, *Diseases of the Eye.*

PATHOLOGY AND BACTERIOLOGY

DAVID JOHN DAVIS, B.S., M.D., Ph.D., *Acting Professor of Pathology and Acting Head of Department*
WILLIAM H BURMEISTER, A.B., M.D., *Assistant Professor, Pathology*
THOMAS HARRIS BOUGHTON, M.D., M.S., *Instructor*
FREDERICK HOWARD FALLS, A.B., M.D., *Instructor*
IRWIN WOODWARD BACH, M.S., M.D., *Assistant*

Required Course—Second Year

General Pathology and Pathological Histology.—General pathology, including the gross and microscopic study of fresh and preserved pathological material. Lectures, recitations, and demonstrations. 2; *one and a half semesters;* laboratory work, 3 two-hour periods, *one and a half semesters.*
Assistant Professor BURMEISTER and Dr. BOUGHTON

Required Courses—Third Year

Special Pathology.—Continuation of the course in general pathology; the gross and microscopic examination of organs, post-mortem bacteriology, and experimental pathology. The work is closely correlated with post-mortem examination (see autopsies) and also with clinical pathology. 2 two-hour periods; *II.* Professor DAVIS and assistants

Autopsies.—Cook County Hospital. Third-year students are required to attend 16 autopsies. 1 two-hour period; *II.*

Required Course—Fourth Year

Autopsies.—Fourth-year students are required to attend 16 autopsies. 1 two-hour period; *I* or *II*.

Optional Courses

Advanced Laboratory and Research Work.—Open to a limited number of qualified students. Hours to be arranged.

Professor Davis and Assistant Professor Burmeister

Diagnosis of Tumors.—Open to students who have had courses in general and special pathology. Hours to be arranged.

Division of Bacteriology

Required Course

[**General Bacteriology and Protozoology.**—Pathogenic bacteria and protozoa. Immunity. Lectures, demonstrations, and laboratory, 160 hours. *Second year; I.* Note—Owing to changes in the curriculum, bacteriology is transferred from the first to the second year. Not to be given in 1914-15.]

Optional Course

Advanced Work and Research in Bacteriology.—Limited to qualified students. Hours to be arranged. Professor Davis

PHARMACOLOGY AND THERAPEUTICS

Bernard Fantus, M.D., *Professor, Pharmacology and Therapeutics*
Alfred Ogle Shaklee, B.S., M.D., *Assistant Professor, Pharmacology*
Adolph Hartung, M.D., *Instructor, Roentgenology*
Walter Edward Simmonds, M.D., *Assistant, Physical Therapy*
Eric Gosta Hakansson, *Student Assistant in Mechanotherapy*

General Statement

The aim of the course is to give a practical knowledge of a limited number of drugs of therapeutic utility. Laboratory work is emphasized. The work includes the study of remedial measures other than drugs, especially of physical remedies and of diet.

Required Courses—Second Year

Elementary Prescription-Writing and Pharmacy.—Each student prepares a typical specimen of each of the more important classes of pharmaceutic preparations, and practises prescribing them. 1; *I*.

Professor Fantus and Assistant Professor Shaklee

Systematic Pharmacology.—Important drugs with predominant local action. Lectures and recitations, 1; *II*. Laboratory, 1 two-hour period; *II*.

Professor Fantus and Assistant Professor Shaklee

Non-Pharmacal Therapeutics.—Remedial measures other than drugs, such as psychotherapy, mechanotherapy, hydrotherapy, electrotherapy, radio-

therapy, climatotherapy, and dietetics. Laboratory work in mechanotherapy and hydrotherapy: practise with electrotherapeutic and roentgenologic apparatus. Lectures and recitations, 3; *II.* Laboratory, 1; *II.*

Professor FANTUS, Drs. HARTUNG and SIMMONDS, Mr. HAKANSSON

Required Courses—Third Year

Systematic Pharmacology.—Important drugs with predominant systemic action. Lectures and recitations, 2; *I.* Laboratory, 1 three-hour period; *I.*

Professor FANTUS and Assistant Professor SHAKLEE

General Therapeutics.—Remedial measures from the standpoint of the desired effect, e. g., diuresis, diaphoresis, catharsis, antipyresis, analgesia, anesthesia, hypnosis, antisepsis. Prescription-writing for hypothetical cases. Lectures and recitations, 2; *II.* Professor FANTUS

Optional Courses

Special Experimental Pharmacodynamics.—Open to a limited number of qualified students of the third or fourth year. Three hours laboratory a week, 48 hours a *semester.*

Professor FANTUS and Assistant Professor SHAKLEE

Biologic Drug Assay.—The valuation of the activity of drugs that cannot be assayed by chemical methods. Three hours laboratory a week, 48 hours a *semester.* Professor FANTUS and Assistant Professor SHAKLEE

Research.—Qualified graduates or undergraduates may do research laboratory work under direction of the members of the staff.

Seminar.—Discussion of current pharmacologic and therapeutic literature and the results of research work in progress.

PHYSIOLOGY AND PHYSIOLOGICAL CHEMISTRY

GEORGE PETER DREYER, A.B., Ph.D., *Professor, Physiology, and Physiological Chemistry, and Head of the Department*

WILLIAM HENRY WELKER, A.C., Ph.D., *Assistant Professor, Physiological Chemistry*

CLAYTON S SMITH, B.S., M.S., Ph.D., *Instructor, Physiological Chemistry*

GROVER TRACY, A.B., *Assistant, Physiological Chemistry*

J CRAIG SMALL, B.S., *Student Assistant, Physiological Chemistry*

HOWARD E CURL, A.B., *Student Assistant, Physiology*

Division of Physiology

General Statement

The apparatus of this department includes sphygmographs, sphygmomanometers, medical battery, and that used for clinical examination of the blood.

Required Courses—First Year

Physiology.—Lectures, class room experiments, demonstrations. 3; *II.*

Professor DREYER

Experimental Physiology.—Laboratory, recitations, conferences. 2 three hour periods; *II.* Professor DREYER and assistants

Required Courses—Second Year

Physiology.—Lectures, class experiments, demonstrations. 4; *I, II.* Professor DREYER

Experimental Physiology.—Laboratory, recitations, and conferences. 1 three-hour period; *I, II.* Professor DREYER and assistants

Optional Courses

Advanced Laboratory Course.—Qualified students may take the optional course intended primarily as graduate work. It consists of a series of exercises introducing the various graphic methods of physiological demonstration and research, and varies in kind and amount according to individual needs.

Journal Club and Seminar.—Reports of significant articles in the current journals; special topics.

Division of Chemistry

Required Courses—First Year

Organic Chemistry.—Biological chemistry; fats, proteins, and carbohydrates. Lectures, demonstrations, and conferences, 2; *I.* Laboratory, 2 three-hour periods; *I.* Dr. SMITH, Messrs. TRACY and SMALL

Physiological Chemistry and Toxicology.—Lectures, demonstrations, and conferences, 2; *II.* Laboratory, 2 three-hour periods; *II.* Assistant Professor WELKER, Dr. SMITH, Messrs. TRACY and SMALL

Prerequisite: A course in organic chemistry as outlined above or an equivalent.

Required Course—Second Year

Physiological Chemistry and Toxicology.—Lectures, demonstrations, and conferences. 2; *I.* Laboratory, 2 three-hour periods; *I.* Assistant Professor WELKER, Dr. SMITH, Messrs. TRACY and SMALL

Optional Courses

Prerequisite: The required courses in organic and physiological chemistry or the equivalent.

Quantitative Urinary Analysis.—Lectures, 1; laboratory, 6. Assistant Professor WELKER, Dr. SMITH and Mr. TRACY

Toxicology.—Lectures, 1; laboratory, 6. Dr. SMITH and Mr. TRACY

Sanitary Chemistry.—Water and sewage analysis; purification. Lecture, 1; laboratory, 6. Assistant Professor WELKER and Mr. TRACY

Food Analysis.—Composition, adulteration, and preservation. Lecture, 1; laboratory, 6. Assistant Professor WELKER and Dr. SMITH

Research.—Open to persons with the requisite scientific training for original investigation under the direction of a member of the staff.

Seminar.—Discussion of the results of recent researches in chemical biology. 1; *I, II.*

SURGERY

DANIEL ATKINSON KING STEELE, M.D., LL.D., *Professor, and Head of the Department*

Division of General Surgery

DANIEL ATKINSON KING STEELE, M.D., *Professor, Clincal Surgery*
THOMAS ARCHIBALD DAVIS, M.D., *Professor, Clinical Surgery*
WILLIAM MCINTYRE HARSHA, A.B., M.D., *Professor, Surgery and Clinical Surgery*
ALBERT JOHN OCHSNER, B.S., M.D., *Professor, Surgery and Clinical Surgery*
DANIEL NATHAN EISENDRATH, A.B., M.D., *Professor, Surgery and Clinical Surgery*
CHARLES DAVISON, M.D., *Professor, Surgery and Clinical Surgery*
ALBERT EDWARD HALSTEAD, M.D., *Professor, Surgery and Clinical Surgery*
CHARLES EDWARD HUMISTON, M.D., *Associate Professor, Clinical Surgery*
NELSON MORTIMER PERCY, M.D., *Associate Professor, Clinical Surgery*
EDWARD MILTON BROWN, M.D., *Associate Professor, Clinical Surgery*
FREDERICK GEORGE DYAS, M.D., *Assistant Professor, Surgery and Clinical Surgery*
GEORGE FARNSWORTH THOMPSON, B.S., M.D., *Assistant Professor, Surgery and Clinical Surgery*
FRANK DONALD MOORE, M.D., *Assistant Professor, Surgery and Clinical Surgery*
JOHN MILTON BERGER, M.D., *Instructor, Surgery, and Assistant, Clinical Surgery*
GEORGE LUTHER DAVENPORT, M.D., *Instructor, Surgery*
RAYMOND WILLIAM MCNEALY, M.D., *Instructor, Surgery*
HENRY LESTER BAKER, M.D., *Instructor, Surgery*
HOWARD OSCAR SHAFER, M.D., *Instructor, Surgery*
CHARLES HERBERT PHIFER, M.D., *Instructor, Surgery*
JOHN ROSS HARGER, B.S., M.D., *Instructor, Surgery and Minor Surgery*
ARRIE BAMBERGER, M.D., *Instructor, Surgery and Minor Surgery*
OSCAR EUGENE NADEAU, B.S., M.D., *Instructor, Surgery (Surgical Pathology)*
JOHN HAROLD EDGECOMB, M.D., *Instructor, Clinical Surgery*
RICHARD ROOT RUPERT, M.D., *Assistant, Clinical Surgery*
CHARLES C. CLARK, M.D., *Assistant, Clinical Surgery*
MAX MEYEROVITZ, M.D., *Assistant, Clinical Surgery*
GEORGE WASHINGTON POST, B.S., A.M., M.D., *Assistant, Clinical Surgery*
ALEXANDER DONALD FERGUSON, M.D., *Assistant, Clinical Surgery*
ROBERT EMMET FLANNERY, M.D., *Assistant, Clinical Surgery*
CARL ALBERT MEYER, M.D., *Assistant, Clinical Surgery*
CHARLES WARREN STIGMAN, M.D., *Assistant, Clinical Surgery*

Required Courses—Third Year

Surgery and Surgical Pathology.—Conferences and recitations. 2; *I, II.*
Assistant Professors Moore, Dyas, Harger and Thompson

Clinical Surgery.—West Side Free Dispensary. Bandaging, surgical dressings, and surgical appliances. 3 two-hour periods, three weeks.
Assistant Professor Harger, Drs. Bamberger and C. Fischer

Clinical Surgery.—Cook County Hospital. 2; *I* or *II.*
Assistant Professor Thompson

Clinical Surgery.—Cook County Hospital. 2; *I* or *II.*
Assistant Professor Humiston

Clinical Surgery.—Cook County Hospital. 2; *I* or *II.*
Assistant Professor Dyas

Required Courses—Fourth Year

Practise of Surgery.— (See calendar below.) Lectures: 1; *I, II.* Quiz: 1; *I, II.*

October

Surgery of the Head and Neck.—Professor Ochsner

November

Surgery of the Thorax.—Professor Eisendrath

December

Surgery of the Stomach.—Professor Harsha

January

Surgery of the Duodenum and Intestines.—Professor Steele

February

Hernia and Post-Operative Treatment.—Professor Davison

March

Surgery of the Liver, Pancreas, and Spleen.—Professor Davison

April and May

Surgical Diseases and Injuries of the Bones.—Professor Halstead
Drs. Phifer, Berger, Davenport, McNealy, Baker, and Shafer

Clinical Surgery.—University Hospital. 1 two-hour period; 8 weeks.
Professor Steele, Drs. Baker and Clark

Clinical Surgery.—University Hospital. 1 two-hour period; 8 weeks.
Professor Davison, Assistant Professor Moore, Drs. Berger and Meyerovitz

Clinical Surgery.—West Side Hospital. 1 two-hour period; 8 weeks.
Professor T. A. Davis and Drs. Edgecomb, Rupert and Stigman

Clinical Surgery.—Cook County Hospital. 1 two-hour period; 8 weeks.
Professor Davison

Clinical Surgery.—Cook County Hospital. 1 two-hour period; 8 weeks.
Assistant Professor Dyas

Clinical Surgery.—West Side Hospital. 2; 8 weeks.
Associate Professor E. M. Brown and Drs. Harger and Ferguson

Clinical Surgery.—College. 2; *I* or *II*.
Associate Professor Percy and Drs. Post and Flannery

Clinical Surgery.—St. Luke's Hospital. 4 two-hour periods; *I*.
Professor Halstead

Clinical Surgery.—St. Luke's Hospital. 4 two-hour periods; *II*.
Professor Harsha

Clinical Surgery.—Augustana Hospital. 4 two-hour periods; *II*.
Professor Ochsner, Associate Professor Percy, and Dr. Flannery

Surgical Pathology.—Laboratory. 1 two-hour period; 8 weeks.
Dr. Nadeau

Surgical Seminar.—Work in co-operation with the departments of medicine and obstetrics. For this work the student receives 48 hours credit, 16 in each department, although this work is in one department only. During the first semester, the groups meet only informally and abstracts are prepared and submitted for criticism. During the second semester, each group will be assigned one hour in which to present its work before the entire class.
Professor Steele and assistants

Division of Orthopedic Surgery

John Lincoln Porter, M.D., *Professor, Orthopedic Surgery*
Charles Mayer Jacobs, M.D., *Associate Professor, Clinical Surgery (Orthopedic)*
David Alexander, M.D., *Instructor*
Harrison Willis Maltby, M.D., *Assistant*
William Arthur Clark, M.D., *Assistant*

Required Courses—Third Year

Orthopedic Surgery.—Lectures. 1; *I*. Professor Porter

Clinical Orthopedic Surgery.—College amphitheatre. 1; *I* or *II*.
Professor Porter

Clinical Orthopedic Surgery.—Cook County Hospital. 1; *I* or *II*.
Associate Professor Jacobs

Required Course—Fourth Year

Clinical Orthopedic Surgery.—St. Luke's Hospital. Limited to two students who serve as externes to Professor Porter in conjunction with Professors Harsha and Halstead. Daily, 8-12; *I, II*.

Division of Genito-Urinary Surgery

DANIEL NATHAN EISENDRATH, A.B., M.D., *Professor, Surgery and Clinical Surgery (Genito-Urinary)*
GEORGE FRENCH STROTHER CARY, M.D., *Instructor*
IRVING SUNTHIMER KOLL, M.D., *Instructor*
CHARLES MORGAN MCKENNA, M.D., *Instructor*
ELMER WELLPOTT SCHNOOR, M.D., *Assistant*

Required Courses—Fourth Year

Genito-Urinary and Venereal Diseases.—Lectures. 1; *I.*
Professor EISENDRATH

Genito-Urinary and Venereal Diseases.—West Side Free Dispensary. Clinics and Conferences. 6.
Professor EISENDRATH and Drs. CARY, KOLL, MCKENNA, and SCHNOOR

Required Courses—Fourth Year

Clinical Surgery (Genito-Urinary).—College amphitheatre. 2; eight weeks.
Professor EISENDRATH and Drs. CARY, KOLL, MCKENNA, and SCHNOOR

Clinical Surgery (Genito-Urinary).—Michael Reese Hospital. 4; *I, II.*
Professor EISENDRATH and Dr. SCHNOOR

Division of Operative Surgery

WILLIAM FULLER, M.D., *Associate Professor*
BERT LESLIE TAYLOR WOODS, M.D., *Instructor*
WILLIAM CHESTER SMITH, M.D., *Instructor*
ARCHIE JAMES GRAHAM, M.D., *Instructor*

Required Course—Second Year

Operative Surgery.—Operations on the cadaver and on animals. 2; *II.*
Associate Professor FULLER and Drs. WOODS, SMITH, and GRAHAM

Required Course—Third Year

Operative Surgery.—In the year 1914-15 the course described above will be given to the third-year class. 2; *I.*
Associate Professor FULLER and Drs. WOODS, SMITH, and GRAHAM

Division of Laryngology, Rhinology, and Otology

JOSEPH C. BECK, M.D., *Associate Professor, Surgery*
RICHARD HUNT BROWN, M.D., *Assistant Professor, Clinical Surgery*
LILLIAN ETHEL TAYLOR, M.D., *Instructor, Surgery*
JOHN ALGERNON CAVANAUGH, M.D., *Instructor, Surgery*
HAROLD BALLENGER, M.D., *Instructor, Surgery*
CLIFFORD BULLEN, M.D., *Instructor, Surgery*
EUGENE BERMINGHAM, M.D., *Instructor, Surgery*

Required Courses—Third Year

Laryngology and Rhinology.—The diseases of the throat and nose. Lectures. 1; 10 weeks. Associate Professor BECK

Laryngology and Rhinology.—College amphitheatre. 1; *I* or *II*.
Associate Professor BECK, Assistant Professor BROWN and Drs. TAYLOR and KAVANAUGH

Laryngology and Rhinology.—West Side Free Dispensary. 6; four weeks.
Associate Professor BECK and Drs. TAYLOR, CAVANAUGH, BALLENGER, BULLEN, and BERMINGHAM

Optional Courses

Clinical Laryngology and Rhinology.—Cook County Hospital. 1.
Associate Professor BECK

Laryngology and Rhinology.—Clinics and conferences. Cook County Hospital. 1 two-hour period. Associate Professor BECK

Division of Otology

NORVAL PIERCE, M.D., *Professor, Surgery (Otology and Clinical Otology)*

Required Course—Third Year

Otology.—Lectures; the surgical anatomy, physiology, and pathology of the ear; 1; six weeks. Professor PIERCE

Clinical Surgery (Otology).—Illinois Eye and Ear Infirmary. 4 periods of one hour each. Professor PIERCE

SUMMARY OF HOURS

First Year

	First Semester		Second Semester		
	Didactic	Laboratory	Didactic	Laboratory	Total
ANATOMY:					
Gross	32	112	32	112	288
Microscopic	32	160	32	64	288
CHEMISTRY:					
Organic	32	96	..	...	128
Physiological	..	...	32	96	128
PHYSIOLOGY	..	...	48	96	144
Total	96	368	144	368	976

Second Year

Subjects	First Semester Didactic	First Semester Laboratory	Second Semester Didactic	Second Semester Laboratory	Total
Anatomy					
Topographical	32	96	...	...	128
Laboratory Diagnosis	..	...	...	64	64
Non-Pharmacal Therapeutics	..	...	48	16	64
Pharmacology	..	...	32	32	64
Prescription Writing and Pharmacy	..	16	...	...	16
Pathology	32	96	16	48	192
Physical Diagnosis	..	...	16	32	48
*Physiology	64	48	64	48	224
*Physiological Chemistry	32	96	...	...	128
Surgery (Operative)	..	...	...	32	32
Total	160	352	176	272	960

Third Year

Subjects	First Semester Didactic	First Semester Clinical	Second Semester Didactic	Second Semester Clinical	Total
†Dispensary	..	75	...	75	150
Laboratory Diagnosis	16	48	...	...	64
Laryngology and Rhinology	..	...	10	16	26
Hygiene	32	...	...	24	56
‡Internal Medicine	80	88	64	40	272
Medical Jurisprudence	..	...	16	...	16
Pathology	..	...	...	64	64
Autopsies	..	...	...	...	32
Pediatrics	16	...	16	16	48
Pharmacology and Therapeutics	32	48	32	...	112
Obstetrics	32	10	32	10	84
Otology	6	4	...	...	10
General Surgery	32	32	32	32	128
Orthopedic Surgery	16	16	...	16	48
Operative Surgery	..	32	...	...	32
Genito Urinary Surgery	16	...	...	...	16
Total	278	353	202	293	1158

*These courses will be presented for the year 1914-15 only.

†The Dispensary hours include the following subjects: Medicine, Surgery, Laryngology, Genito-Urinary Diseases, and Orthopedic Surgery.

‡Including Physical Diagnosis for the year 1914-15.

Fourth Year

Subjects	First Semester		Second Semester		
	Didactic	Clinical	Didactic	Clinical	Total
*Autopsies	..	...	...	...	32
Dermatology	32	16	...	...	48
†Dispensary	..	...	...	...	162
Genito-Urinary Surgery	..	...	...	16	16
Gynecology	32	...	...	52	84
Medicine	96	50	64	50	260
Neurology	16	16	16	16	64
Obstetrics	32	24	32	24	112
Ophthalmology	12	...	...	16	28
Pediatrics	..	24	...	24	48
Psychiatry	..	...	16	8	24
Roentgenology	..	...	...	4	4
Surgery	32	94	48	94	268
Surgical Pathology	..	...	...	16	16
Total	252	224	176	320	1166

Grand total of hours for the four years 4260
Duplication of hours 208

Actual number of hours 4052

FURTHER INFORMATION

For further information, including circular, address *The Secretary of the College of Medicine,* Congress and Honore Sts., Chicago, Ill.

*This subject will be presented in the senior year for the year 1914-15 only.
†The Dispensary hours include the following subjects: Dermatology, Gynecology, Neurology, Pediatrics, and Ophthalmology.

THE COLLEGE OF DENTISTRY

(For the faculty of the College of Dentistry, see page 37; for a description of the building, see page 57.)

LOCATION

The College is situated on the corner of Harrison and Honore streets in Chicago, directly opposite the Cook County Hospital, in the center of the clinical field of Chicago. On the west is the West Side Hospital, and on the north the College of Medicine of the University of Illinois.

PROSTHETIC LABORATORIES

The prosthetic laboratories are three in number, one for each class. They are equipped with new model benches and each student is provided with two drawers, gas, compressed air, and electric light. Each laboratory is supplied with hot and cold water, electric lathes for grinding and polishing, molding benches, furnaces, and casting devices.

INFIRMARY

The infirmary occupies the top floor. The equipment includes chairs of improved type with fountain cuspidors and instrument brackets attached. Each chair is furnished with an electric engine, electric light, compressed air, gas connection, and a stand for instrument case. A sterilizer, stationed near the center of the infirmary, is continuously in operation. In a cabinet on one of the walls are exhibited specimens of various drugs, both in their crude state and in the various forms in which they are prepared for use in dentistry.

At one end of the infirmary is a laboratory for the prosthetic work, equipped with apparatus and tools for soldering, plate work, polishing, etc., and a laboratory for porcelain work with electric furnaces and porcelain ovens.

LIBRARY

The Library is housed with the Quine Library of the College of Medicine in the medical building adjoining. Through the courtesy of Mrs. Margaret Cook, wife of the late Dr. George Washington Cook, former Dean of the College of Dentistry, the dental library belonging to his estate, comprising two hundred volumes, besides unbound volumes of dental journals, has been donated to the College. A dozen dental journals are received regularly. The library is open from 9 a. m. to 5 p. m. daily during the school year, with a librarian in attendance.

ADMISSION

An applicant for admission to the College of Dentistry must be at least 18 years of age. Women are admitted on the same terms as men.

Each candidate for admission must present a certificate of graduation from an accredited high school, or an equivalent; which equivalent is interpreted to mean *15 units* of preparatory work in an accredited high school or academy or a state normal school.*

No "conditions" can be permitted; the full 15 units must be offered.

The foregoing requirements may be satisfied either (a) *by certificate* or (b) *by examination.*

(a) Entrance credits will be accepted *by certificate* from the following sources:

(1) From high schools and academies in the State of Illinois which are accredited to the University of Illinois.

(2) From the state normal schools of Illinois and other state normal schools having equal requirements for graduation.

(3) From schools accredited by the North Central Association of Colleges and Secondary Schools.

(4) From schools accredited to the state universities which are included in the membership of the North Central Association of Colleges and Secondary Schools.

(5) From schools approved by the New England College Entrance Certificate Board.

(b) Entrance credits may be made *by examination:*

(1) In the examinations conducted by the Registrar of the University of Illinois at the University in Urbana in January, July, and September of each year. For program see pages 77-79.

(2) In the examinations conducted by the Registrar of the University of Illinois at the College of Medicine in the fall. In 1915 these examinations will be held on September 23, 24.

(3) In the examinations conducted in June of each year by the College Entrance Examination Board. See page 73.

(4) In the examinations conducted by the Regents of the University of the State of New York.

Applicants for admission coming from institutions of higher learning, whether candidates for the freshman class or for advanced standing, must present entrance credentials or pass entrance examinations as indicated above.

The College of Dentistry will receive no student who is not present within 10 days after the opening day of the session in each year, or in case of necessary delay by reason of illness, properly certified by the attending physician, within 20 days after the opening day.

ADMISSION TO ADVANCED STANDING

Persons who can meet the requirements for admission to this college and who have studied dentistry in other schools for not less than one year may be

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*A unit is the amount of work represented by the pursuit of one high-school subject for one year of 36 weeks, with five forty-minute recitations each week, or the equivalent in laboratory or other practise.

admitted to advanced standing after satisfying the faculty that they have completed an amount of work equivalent to that which is exacted by this college in the respective classes.

Students who have had one or more years in the College of Medicine or in other medical colleges of equal rank, are allowed credit toward graduation for so much of the required course in dentistry as was included in their medical course. They must, however, be registered for full time. Graduates of the University of Illinois with degree of Bachelor of Arts or Bachelor of Science, who have taken courses in biology and chemistry in the University, can secure advanced standing in the course in dentistry, provided they have done full work in the sciences required in the dental curriculum.

Graduates of recognized medical colleges may secure advanced credit for work and one year of time toward graduation, and are excused from lectures and examinations in general anatomy, chemistry, histology, pathology, and physiology, but are required to take lectures and examinations in dental subjects.

LENGTH OF COURSE

The courses are graded and cover three years of college work. The teaching of one year is not repeated, and the course is progressive, the several classes having separate laboratories and at no time taking lectures or demonstrations together.

If, for any cause, a regular student desires to extend his studies over a period of four or more years, a course of study will be specially arranged for him.

REQUIREMENTS FOR GRADUATION

The degree of Doctor of Dental Surgery will be conferred on students who have completed the course of instruction, attended the required time, and passed satisfactory final examinations. To be eligible to the degree, the student must be twenty-one years of age, must possess a good moral character, and must have paid all fees.

The monthly report of attendance, and the standing of students in quizzes, recitations, laboratory work, and infirmary practise, both operative and prosthetic, are considered in making up the rating of final examinations.

METHOD OF INSTRUCTION

Instruction is given by means of lectures, recitations, demonstrations, and laboratory work. The time of the student is about equally divided between laboratory and clinical work on the one hand and lectures and recitations on the other.

Students are admitted to the laboratories from the beginning of the first year. The laboratory work is closely correlated with the lectures and clinical studies.

In the clinical work, methods both of investigation and of reasoning are carefully and systematically taught. Diagnosis, prognosis, and indications for treatment receive no less attention than methods of construction and the technic of procedures.

DESCRIPTION OF COURSES

BACTERIOLOGY, PATHOLOGY, AND ORAL SURGERY

Frederick Brown Moorehead, D.D.S., M.D., F.A.C.S., *Professor, Oral Surgery, Bacteriology, and Pathology, and Head of the Department*
David John Davis, B.S., M.D., *Professor, Pathology*
Louis Schultz, D.D.S., M.D., *Assistant Professor, Oral Surgery and Pathology*
Frank Joseph Bernard, D.D.S., *Instructor, Extracting*
Edwin Paul Swatek, D.D.S., *Clinical Assistant, Oral Surgery*
Irwin Woodward Bach, M.S., M.D., *Assistant, Bacteriology and Pathology*
Anna Bolan, *Nurse in Oral Surgery Clinic*

General Bacteriology.—Classification of bacteria, products of bacterial growth, methods of observing, cultivating, isolating, and identifying bacteria; sterilization, disinfection, pathogenic bacteria in diseased conditions of the mouth; cultural and staining technic; dental caries, pathological conditions of first and second dentition, sensitive dentin, hyperemia and congestion, pulp nodules, putrescent pulps, acute and chronic alveolar abscesses, diseases of the peridental membrane, necrosis of hard and soft tissues. Lectures, recitations, demonstrations, laboratory work. *112-7; I; 2**. Professor Davis and assistants

General Pathology.—Circulatory disturbances, retrogressive and progressive processes, inflammation, tumors; pathology of important organs; blood and urine analysis; disease processes involving the teeth and buccal cavity. Lectures, recitations, demonstrations of fresh and preserved specimens, laboratory work. *112-7; II; 3.* Professor Davis and assistants

Special Bacteriology and Pathology.—Relation of foci of infections found in the mouth to constitutional diseases; the pulp and peri-dental membrane. Practical cases, from the surgical clinic and infirmary, supplemented by lectures, recitations, demonstrations, and laboratory work. *96-3; I, II; 3.*
Professor Moorehead, Assistant Professor Schultz, and assistants

Oral Surgery.—Major operations performed in the clinic; diagnosis and treatment of the minor lesions.

(a) *Lectures and recitations* on etiology, diagnosis, treatment, and local and general anesthetics. *64-2; I, II; 3.*

(b) *Surgical Clinic.*—Every Monday morning from 9:00 to 12:30. Diagnosis, case discussions, and operations. Reports. *112-3½; I, II; 3.*
Professor Moorehead, Assistant Professor Schultz, and assistants

Extracting Clinic.—Selection and application of forceps and elevators; demonstration of nitrous oxid, oxygen, novocain; conduction and infiltration; asepsis and after treatment of cases. Two afternoons a week. *192-6; I, II; 3.*
Dr. Bernard

*The first number indicates the total number of hours in a course; the number after the hyphen indicates the number of exercises a week; the Roman numerals I, II indicate the first and second semesters, and the final numbers 1, 2, 3 indicate respectively the freshman, junior, and senior years. Thus, 112-7; I; 2 means that the course includes 112 hours, 7 a week, given during the first semester of the junior year.

OPERATIVE DENTISTRY

DONALD MACKAY GALLIE, D.D.S., *Professor*
LOUIS E BAKE, D.D.S., *Assistant Professor*
JOHN C MCGUIRE, D.D.S., *Superintendent of Infirmary, Instructor*
JACOB HYMAN KAPLAN, D.D.S., *Instructor*
W IRA WILLIAMS, D.D.S., *Instructor*

Operative Dentistry.—Nomenclature; tooth forms in charts, drawings, and models; carving in ivory or bone; dissections of the pulp chamber and canals; longitudinal and transverse sections; instrument making and care; cavity preparation in ivory blocks and tooth forms; instruments for different cavities; manipulation, grasps, rests, and direction and control of force; treating, cleaning, and filling root canals; filling materials, their application, preparation, and manipulation. *256-8; I, II; 1.* Assistant Professor BAKE, Dr. KAPLAN

Operative Dentistry.—Cavity nomenclature and preparation; use of the odontotype; inlay technic, both gold and porcelain; correct chair positions, the application of the rubber dam, the use of clamps, wedges, and separation. *Operative Clinic*—Beginning with the second semester, second year students are admitted to the infirmary, and given instruction in oral prophylaxis, followed by regular infirmary work. *One lecture and recitation throughout the year. 128 hours laboratory.* Professor GALLIE, Assistant Professor BAKE

Operative Dentistry.—Review; management of patients and special cases; treatment and filling of children's teeth; erosion, atrophy, and abrasions. Lectures and recitations. *64-2; I, II; 3.*

Professor GALLIE, Assistant Professor BAKE

PROSTHETIC DENTISTRY

GEORGE WALTER DITTMAR, D.D.S., *Professor*
SOLOMON PERRY STARR, D.D.S., *Assistant Professor*
JACOB HYMAN KAPLAN, D.D.S., *Instructor*
W IRA WILLIAMS, D.D.S., *Instructor*
WARREN C HAWTHORNE, M.S., *Instructor, Metallurgy*

Prosthetic Dentistry.—Terminology; materials; impressions; plaster casts and models; base plates; articulation and occlusion; carving, polishing, and finishing vulcanite dentures; dies; counter die construction; swaging and soldering; casting aluminum and "fusible metal" plates. *256-8; I, II; 1.*

Assistant Professor STARR, Dr. KAPLAN

Prosthetic Dentistry.—Crown work; root preparation, band construction, and crown conformation; restoration of badly decayed roots for crowns; repairing and restoring portions of fractured roots; carving, swaging, and casting cusps; swaging seamless crowns; casting full metal and porcelain faced crowns, cap and pin crowns; grinding and backing facings; application of detachable porcelain crowns.

Bridge work: casting; removable bridge work; tense friction attachments; splints and bar supports; selection of porcelain facings and crowns; grinding, polishing, and staining. *224-7; I, II; 2.*

Professor DITTMAR, Assistant Professor STARR, Dr. KAPLAN

Prosthetic Dentistry.—Plate denture construction; the human dental mechanism; temporo-mandibular articulation; prosthetic operations; occluding frames; registration of condyle paths and rotation points of the mandible; physiognomy and temperamental characteristics of individuals and construction of dentures with teeth of proper size, form, shade, and arrangement; grinding, shaping, and staining; continuous gum dentures and vulcanite and metallic bases; partial plates and removable bridge construction; porcelain and forms of porcelain teeth; mineral stains; crowns and bridge construction; splints for the retention of loosened teeth and maxiliary fractures; velæ and obturators for the restoration of cleft plates. *32-1; I, II; 3.* Professor Dittmar

Metallurgy.—Physical and chemical properties of metals and alloys; heat, production, and measurement; fusion, vaporization, and distillation; electrical terms, electrolysis and electroplating, and mechanics of forces, levers, etc., as exemplified in the working tools of the craft. Lectures, recitations, and demonstrations. Text-book: Hodgson's *Metallurgy. 16-1; I.* Mr. Hawthorne

MATERIA MEDICA AND THERAPEUTICS

Edgar D Coolidge, D.D.S., *Professor*
Arthur G Nauman, D.D.S., *Instructor*

Materia Medica.—Drugs used in dentistry; terminology of materia medica. *32-1; I, II; 1.* Dr. Nauman

Materia Medica.—Pharmaceutical preparations and the classification of drugs; administering; conditions which modify effects; action upon the tissues and organs; poisons, their action and treatment. (Illustrated by a series of laboratory and animal experiments.) Lectures and recitations. Text-book: Prinz's *Dental Materia Medica and Therapeutics.. 16-1; I; 2.*
Professor Coolidge

Therapeutics.—Prescription-writing; pathological lesions and their treatment; dental caries; salivary deposits; oral hygiene and prophylaxis. Lectures and recitations. Text-books: Prinz's *Materia Medica and Therapeutics;* Marshall's *Mouth Hygiene. 16-1; II; 2.* Professor Coolidge

Therapeutics.—Pathologic conditions of the peridental membrane and pulp; treatment; dental caries; diseases of the dental pulp, hypersensitive dentin, pulp capping, active and passive hyperemia of the pulp, anesthetization and devitalization of the pulp, its removal, and the subsequent treatment and filling of root canals; pulp gangrene, suppuration, and alveolar abscess; discoloration and bleaching; the peridental membrane, pericementitis, apical and complete, septic and non-septic, phagadenic pericementitis, gingivitis, pyorrhea, and stomatitis; preventive treatment; oral prophylaxis; thesis. Text-book: Prinz's *Dental Materia Medica and Therapeutics. 32-1; I, II; 3.* Professor Coolidge

ORTHODONTIA

Frederick Bogue Noyes, B.S., D.D.S., *Professor*

Orthodontia.—Normal occlusion; harmonious development of the features; mal-occlusions. Lectures, illustrated by lantern slides and the projectoscope. Text-book: Angle's *Malocclusion of the Teeth. 32-1; I, II; 3.*
Professor Noyes

ANATOMY, HISTOLOGY, AND EMBRYOLOGY

Frederick Bogue Noyes, B.S., D.D.S., *Professor, Histology*
Albert Chauncey Eycleshymer, M.D., Ph.D., *Professor, Anatomy*
Newton G Thomas, A.B., D.D.S., *Instructor, Histology*
Roy Lee Moody, A.B., Ph.D., *Instructor, Anatomy*

The laboratories for gross anatomy, occupying two floors in the Dental Building, comprise two dissecting rooms and a number of smaller rooms for embalming, sorting, and prosecting. The laboratory for histology and embryology, and the offices and research laboratories are on the third floor of the Medical Building. The equipment includes apparatus for embalming, sectioning, macerating, corroding, and digesting; microtomes, microscopes, paraffin ovens, drawing apparatus, chemicals, glassware ,Grübler stains, etc. A small museum contains special dissections, osteological preparations, models, sets of histological, neurological and embryological slides, charts, and lantern slides. The departmental library contains nearly all the standard texts and about 2,500 special monographs. All the English, German, and French anatomical journals are received. The Crerar library is readily accessible and makes it possible to consult practically all literature of anatomy, zoology, and biology.

Systematic Anatomy.—Dissection of the entire body; the respiratory and digestive systems; the head and neck. Lectures, demonstrations, laboratory work, recitations. *288-9; I, II;* 1.

Topographical Anatomy.—Head and neck in serial section; topography of the organs and structures. Lectures, recitations, demonstrations, laboratory work. *114-9; I; 2.* Professor Eycleshymer, Dr. Moody

General Histology.—Cell structure and function; relation of cells and intercellular substances and tissues; elementary tissues; histology of the circulatory system, the alimentary tract, and the glands connected with it, the urinary system, the respiratory system, and the skin, nails, and hair. Three hours laboratory and one hour lecture or quiz a week. Text-book: Bailey. *128; I, II, 1.*
Professor Noyes, Dr. Thomas

Dental Histology and Embryology.—The tissues of the teeth, the supporting tissues, and the tissues of the oral cavity; the enamel; operative procedures; preparation of cavity walls; general embryology and embryology of the teeth, mouth, and jaws. Three hours laboratory and one hour lecture or quiz a week. Text-book: Noyes's *Dental Histology and Embryology. 128; I, II; 2.* Professor Noyes, Dr. Thomas

Graduate Work

Dental Histology.—In the summer of 1915 a special course of six weeks in dental histology will be offered for those desiring to prepare for teaching in dental schools. The course will consist of at least three hours of laboratory work and one hour's lecture or quiz per week.

PHYSIOLOGY AND CHEMISTRY

George Peter Dreyer, A.B., Ph.D., *Professor, Physiology and Chemistry*
William Henry Welker, A.C., Ph.D., *Assistant Professor, Chemistry*
Clayton S Smith, B.S., M.S., Ph.D., *Instructor, Chemistry*

Grover Tracy, B.S., *Assistant, Chemistry*
J Craig Small, *Student Assistant, Chemistry*
Howard Curl, A.B., *Student Assistant, Physiology*

Physiology

The students of the College of Dentistry take their work in physiology in the physiology laboratory of the College of Medicine. The work falls in the junior year when the prerequisites, including anatomy, histology, and chemistry, have been in large part completed.

Systematic Human Physiology.—Lectures and recitations. *96-3; I, II; 2.*

Practical Physiology.—Demonstrations and laboratory exercises running parallel with the didactic course. *64-2; I, II; 2.*

Chemistry

The instruction in chemistry is given in the laboratories of the College of Medicine.

General Inorganic Chemistry.—Metals and non-metals. Four hours lecture and recitation, six hours laboratory a week. Text-book: McPherson and Henderson's *Court in General Chemistry;* Remsen's *Chemical Experiments. 160; I; 1.* Mr. Tracy, Mr. Small

Qualitative Analysis.—Metals and acids; the group; solutions of unknown bases, unknown acids, and unknown bases and acids. Four hours lectures and recitations, six hours laboratory a week. Text-book: Gooch and Browning's *Outlines in Qualitative Chemical Analyses. 80; II, first-half; 2.*
Dr. Smith, Mr. Tracy, and Mr. Small

Metallurgy.—Extraction and refining of metals; physical properties. Laboratory analyses of substances related to dentistry, including ores, alloys, solders, and cements. Four hours lectures and recitations, six hours laboratory a week. Text-book: Hodgen's *Practical Dental Metallurgy. 80; II, second half; 1.* Assistant Professor Welker, Mr. Tracy, Mr. Small

DENTAL JURISPRUDENCE

Elmer Delbert Brothers, LL.B., *Lecturer*

Dental Jurisprudence.—The dentist's individual and professional rights and obligations; responsibilities arising from the relation of dentist and patient; dental laws of the various states. *Senior year.* Mr. Brothers

RADIOGRAPHY

John C McGuire, D.D.S., *Instructor*

Radiography.—The X-ray as a diagnostic agent; the radiograph; exposure, development, etc. *Senior year.* Dr. McGuire

COMPARATIVE ANATOMY

Elmer S Riggs, A.B., A.M., *Lecturer*

Evolution of the masticatory apparatus; food habits and digestive processes. *15-1; II.* Mr. Riggs

SUMMARY OF COURSE

Freshman Year

Departments	Hours Didactic	Laboratory	Total
Materia Medica	32	...	32
Anatomy	64	256	320
Histology	32	96	128
Chemistry	96	192	288
Operative Technic	..	256	256
Dental Anatomy	32	...	32
Prosthetic Technic	..	256	256
Total	256	1056	1312

Junior Year

Departments	Hours Didactic	Laboratory	Total
Anatomy	*32	*128	160
Physiology	64	96	160
Materia Medica	32	...	32
Bacteriology	*16	*96	112
Pathology	†16	†96	112
Histology	32	96	128
Prosthetic Dentistry	32	256	288
Operative Dentistry	32	128	160
Comparative Anatomy	†16	...	†16
Metallurgy	10	...	10
Total	282	896	1178

Senior Year

Departments		Hours Didactic	Laboratory	Total
Special Bacteriology and Pathology	32	64	...	96
Oral Surgery	64	...	96	160
Extracting	...	...	256	256
Therapeutics	64	...	...	64
Orthodontia	32	...	128	160
Prosthetic Dentistry	64	...	448	512
Operative Dentistry	64	...	448	512
Porcelain Art	16	80	...	96
Jurisprudence (Dental)	16	...	...	16
Ethics and Economics	10	...	...	10
Total	362	144	1376	1882

*First Semester.
†Second Semester.

TEXT BOOKS

Students are requested to consult the head of each department before purchasing text books. The most recent editions are required in every case.

FEES

Matriculation fee (paid each year)	$ 5.00
Tuition, each year (including laboratory and dissection fees)	150.00
Locker fee	2.00
	$157.00

Fees are not returned to students who are suspended or expelled or to those who are absent for any cause except illness. Payments should be made in currency or in Chicago exchange drawn to the order of the University of Illinois.

FEES ARE PAYABLE IN ADVANCE. Students unable to meet these requirements must make satisfactory arrangements with the Dean at the beginning of the course.

BOARD AND ROOMS

Board and rooms convenient to the College can be obtained at prices varying from four to six dollars a week; rooms without board, furnished or unfurnished, can be obtained at from six to ten dollars per month.

FURTHER INFORMATION

For further information, address

THE DEAN OF THE COLLEGE OF DENTISTRY,
Harrison and Honore Streets, Chicago, Illinois.

THE SCHOOL OF PHARMACY

For the *faculty* of the School of Pharmacy, see page 38; for a description of the *building*, see page 57.

HISTORY

The School of Pharmacy was originally the Chicago College of Pharmacy and was incorporated under that name September 5, 1859. Prior to that time there were but three schools of pharmacy in the country, and these were located in the eastern states.

While the primary object of the institution was to provide instruction in the science and art of pharmacy, other functions were developed. Thus, a code of ethics was early adopted by the members; successful efforts were made to bring about better relations between pharmacists and physicians; the pioneer pharmaceutical library was established; and for eighteen years beginning with 1868 a monthly journal, *The Pharmacist*—the first of its kind in the West—was published.

In October, 1859, the first course of lectures was instituted, occupying three evenings a week for a period of six months. Of the first class, but two students were graduated in 1861. The war caused a suspension of the teaching, and the school was not reopened until 1870. The great fire of 1871 destroyed the equipment, but pharmacists throughout Europe and America extended help to the institution, furnishing a library and an outfit of apparatus, which became the nucleus of the present equipment. In 1872 the instruction was resumed for the second time and has since continued without interruption.

In 1880 the members and graduates of the College took an active part in the formation of the Illinois Pharmaceutical Association, which in the following year secured the passage of the pharmacy law.

The twenty-fifth anniversary of the founding of the College was signalized by the removal of the College to a larger building at 465 State street. Up to this time instruction had been given mainly by means of lectures, laboratory work being entirely optional. Laboratory courses in pharmacy, chemistry, and vegetable histology were now made obligatory. A laboratory devoted entirely to prescription compounding was established in 1892.

The College was formally united with the University May 1, 1896, becoming the technical School of Pharmacy of the University of Illinois. In the management of the School, the Trustees and officers have the assistance of an advisory board of pharmacists, elected by the registered pharmacists of the State through the Illinois Pharmaceutical Association.

LOCATION

The School of Pharmacy occupies the four upper floors in a building located at Michigan Boulevard and Twelfth Street.

A half block east of the building is the Illinois Central Depot; and one block west are the Cottage Grove Avenue, Indiana Avenue, and Twelfth Street surface lines, and the Twelfth Street Station of the South Side Elevated Railroad.

On Michigan Avenue, immediately south of the School, are to be found some of the best low-priced boarding and rooming places in the city. Satisfactory accommodations may be readily secured within a short distance of the School.

EQUIPMENT

The east end of the building is occupied by lecture halls, of which there are three, arranged one above the other and having a seating capacity of from one hundred fifty to three hundred persons.

The laboratories are six in number, including one each for qualitative analysis, quantitative analysis, special work in chemistry, microscopy, manufacturing pharmacy, and dispensing. The total capacity of these laboratories is sufficient for the accommodation of 348 students, working at one time.

The laboratories are supplied with compound microscopes, analytical balances, and special apparatus, and with collections of crude drugs, medicinal plants, chemicals, and pharmaceutical products.

The library contains over two thousand volumes, including, in addition to the usual works of reference, many rare books. Complete files of the leading pharmaceutical journals are an important feature.

COURSES OF INSTRUCTION

For the Degree of Graduate in Pharmacy

In the course leading to the degree of Graduate in Pharmacy the instruction is so arranged as to require the attendance of each student on three days each week and from twenty to twenty-one hours weekly during two annual sessions of thirty weeks each. This arrangement is advantageous to drug clerks who desire to spend a part of their time in drug stores while attending school, thereby adding to their practical experience and at the same time earning a part or all of their living expenses.

The subjects taught are chemistry, general, pharmaceutical, and analytical; pharmacy, theoretical, manufacturing, and dispensing; botany; physiology; and materia medica.

For the Degree of Pharmaceutical Chemist

To meet the demand for special training on the part of students who desire to pursue more extended courses in pharmaceutical chemistry, applied chemistry, and bacteriology, or to prepare themselves for positions under the Food and Drugs Act, this School offers a course leading to the degree of Pharmaceutical Chemist. It comprises two annual sessions of thirty-six weeks each, with instruction on five or six days each week, amounting to about thirty-three hours weekly, or a total of 2,300 hours in the entire course.

This course is partially concurrent with the shorter course and includes all the didactic instruction given in the latter. It consists largely of laboratory practise. In addition to the subjects mentioned above it embraces organic analysis and proximate assays, new remedies, analysis of urine, food and sanitary analysis, bacteriology, and applied microscopy.

The system of teaching includes lectures, illustrations, demonstrations, recitations, written and oral examinations, and individual practise and personal instruction in the various laboratories, much time being devoted to this important part of the student's work.

ADMISSION

The regular session opens September 20, 1915. The shorter course ends April 27, 1916; the longer course closes June 9, 1916.

Applicants for admission to the course leading to the degree of Pharmaceutical Chemist must be at least seventeen years of age and must be graduates of accredited high schools or furnish evidence of a preliminary education equivalent thereto.

Applicants for admission to the course leading to the degree of Graduate in Pharmacy must be at least seventeen years of age and must have completed two years' work in an accredited high school or the full educational equivalent. *Beginning in September, 1916, the requirements for admission to the course leading to the degree of Graduate in Pharmacy will be graduation from an accredited high school, including the completion of 15 acceptable units of high school work, or the full educational equivalent.*

Admission as special students, not candidates for a degree, is restricted to registered apprentices, assistants, or pharmacists, not less than twenty-one years of age.

Students who have pursued courses of study in other colleges of pharmacy will be given credit for such portions of their work as are equivalent to the work required by this college.

GRADUATION

In conformity with the usual custom of pharmaceutical schools, drug store experience is not made a requirement for the degree of Pharmaceutical Chemist. Students who have satisfactorily completed the course will be awarded the degree upon the recommendation of the faculty.

For the degree of Graduate in Pharmacy this School has always required practical drug store experience. The actual time of attendance at the School, amounting to fourteen months, is credited as part of the four years of practical experience required for the degree. Candidates must have attained the age of twenty-one years and have satisfactorily finished the work leading to the degree. Students who have successfully met the scholarship requirement, but are lacking in age or in practical experience, will receive a certificate and will be awarded the diploma when the requirements of age and experience are satisfied.

Persons competent to fulfill the general requirements of admission to the University may be granted credits upon other University courses for equivalent work completed at the School of Pharmacy.

STATE REGISTRATION

To become a registered pharmacist in Illinois, it is necessary to pass an examination before the State Board of Pharmacy, no diplomas being recognized.

The diploma of this School is, however, accepted in lieu of examination for registration in several states and territories; and in other states, including New

York and Pennsylvania, where graduation prerequisite laws are in force, this School is among the schools recognized, and its diploma admits to the examination.

The amendments to the Illinois Pharmacy Law, in effect July 1, 1907, give credit, as a part of the "practical experience in compounding drugs" required by the law, for the actual time of attendance at a recognized school of pharmacy but not to exceed two years for registered pharmacist or one year for registered assistant pharmacist.

FEES AND EXPENSES

For a statement of the fees, see page 120. Fees are payable in advance. Students unable to meet this requirement must make satisfactory arrangements with the Actuary at the beginning of the course.

Board and Lodging.—Good board and lodging, within a short distance of the School, can be had for from five to six dollars per week. This expense may be somewhat reduced by two or more students rooming together. The Actuary keeps a list of suitable boarding and rooming places, with their rates.

Selection of Seats.—Seats in the lecture halls and desks in the laboratories will be assigned to students by the Actuary, in the order of enrollment. To enroll, junior students will fill out the matriculation blank and forward it to the Actuary, together with credentials for admission and the matriculation fee of five dollars; senior students will make a payment on tuition account of five dollars. It is of advantage to students to matriculate early.

Opportunities for Employment.—The Actuary keeps a register of students desiring employment and of pharmacists wishing to employ students. Students desiring employment are invited to correspond with him.

FURTHER INFORMATION

Further information may be found in the special announcement of this school, which may be obtained from the Actuary, School of Pharmacy, Michigan Avenue and Twelfth Street, Chicago.

PART III
DESCRIPTION OF COURSES

DESCRIPTION OF COURSES

EXPLANATION

The arrangement of subjects in the following Description of Courses is alphabetical. The connections of allied departments are indicated by cross references.

Following the description of each course of instruction will be found the requirements, if any, for admission to that particular course. The sequence indicated by these prerequisites must be followed. For instance, under Art and Design 5, Painting, the prerequisites given are Art and Design 1, 2, and 3. These three courses must be completed before Course 5 may be taken.

If a course not required for graduation is selected by fewer than five students it may be withdrawn for the semester.

Graduate courses are numbered upward from 100.

Credit is reckoned in *semester hours,* or simply *hours.* An *hour* is one class period a week for one semester, or the equivalent in laboratory, shop, or drawing room. Graduate work is not recorded in credit hours, nor do the credit hours of undergraduate courses apply to graduate students enrolled in them.

The semester, and the number of *hours* each semester for which the course counts, are shown after each course; thus: *I, II;* (2). The Roman figures indicate semesters; the Arabic numerals in parenthesis indicate *hours* of credit for *each semester* for undergraduates. The omission of a course for the current year is indicated by enclosing the entire description of such a course in brackets.

"S," which is prefixed to each of the courses offered in the summer session, means "summer" and is used to distinguish such courses from those of the same number offered during the regular university year. Summer courses do not always cover the same ground as those similarly numbered in the regular session. Students wishing to know in what respect such courses are similar will be gladly furnished with the desired information upon application to the Director.

All courses in the summer session that are granted graduate credit are marked with an asterisk (*). Courses numbered 100 and above are open only to graduate students.

ACCOUNTANCY

(See Economics.)

AGRICULTURE

SUMMER SESSION COURSES

Albert Woodward Jamison, M.S., *Associate in Agricultural Extension*
William Pitt Miller, B.S., *Assistant in Agriculture*
Frederick Charles Bauer, B.S., *Associate in Soil Fertility*
William Herschel Smith, M.S., *Instructor in Animal Husbandry*
Elmer Roberts, B.S., *Assistant in Agriculture*
John Joseph Gardner, B.S., *Instructor in Pomology*

The work in the Summer Session of the University is planned to meet the needs of prospective teachers of agriculture in elementary and high schools.

S 1. Crop Production.—Plant growth, structure; habits and requirements for production of farm crops; seed selection; preparation of seed bed and seeding; tillage, harvesting; rotation; cost of production; purity of grain; grain judging; weeds, identification and control; diseases and control. Lectures, laboratory. (2). Mr. Bauer

S 2. Soils and Fertilizers.—Origin of soil materials; formation; classification; moisture; physical characteristics affecting farm operations; physical improvement of soils; systems of farming; influence of fertility upon crop yields; effect of crops upon soil and succeeding crops; rotations; manures and fertilizers, composition and value; fertility of Illinois soils. Lectures, laboratory. (2½). Mr. Bauer

S 4. Fundamentals of Live Stock Judging.—The names and location of the external parts of various kinds of live stock; the use of the score card; comparative judging; breed identification and types of farm animals. A study of the methods, and a consideration of the materials available for teaching live stock judging in secondary schools. (2½). Mr. Smith

S 5. Orchard and Garden.—Principles of orcharding; the home orchard from planting to bearing; caring for fruit trees; the home vegetable garden. Lectures, recitations, and field work. (2). Mr. Gardner

S 6. Poultry.—Types, breeds and varieties. Exhibiting, judging; poultry houses and equipment; breeding, feeding, hatching, and brooding; marketing eggs; fattening, dressing and shipping of poultry. (2½). Mr. Miller

S 7. General Agriculture.—One-year course. A general course in the elements of agriculture, designed to cover the work offered in a year's high-school course. Type studies of farm crops, fruits, animals, soils, business, and special farm problems practical for school work. Lectures, quizzes, and field work. (2½). Mr. Miller

S 8. Seminar.—Conferences and discussions on the problems of public-school agriculture; courses of study; extension activities; community work and rural education. Lectures, reference readings and round-table discussions. (½). Mr. Jamison, Mr. Miller

S 9. Genetics.—A study of the principles of heredity and variation. The course considers causes and course of evolution, reproduction, transmission of characters, causes of variation, relative effects of heredity and environment and methods of plant and animal improvement. Lectures, quiz work, assigned reading, and demonstrations. (2). Mr. Roberts

S 10. Farm Mechanics.—Elementary studies of farm mechanics dealing with the principles of farm machinery; equalizers and hitches; ropes, their care, use, knots and splices; purchase and care of implements for seeding, cultivating, and handling of crops; concrete construction on the farm; design and construction of farm buildings. Lectures, laboratory work. (2½). Mr. JAMISON

S 11. Principles of Feeding Farm Animals.—The classification of feeding stuffs; calculation of rations for farm animals; digestibility and uses of food nutrients. A study of the materials available for practical exercises in secondary schools. (2). Mr. SMITH

AGRICULTURAL EXTENSION

FRED HENRY RANKIN, *Superintendent and Assistant to the Dean, with rank of Assistant Professor*
ARETAS WILBUR NOLAN, M.S., *Assistant Professor*
ALBERT WOODWARD JAMISON, M.S., *Associate*
JOSEPH HARVEY CHECKLEY, B.S., *Assistant*
WILLIAM PITT MILLER, B.S., *Assistant*
ROBERT ENOCH HIERONYMUS, A.M., LL.D., *Community Adviser*

1. Principles and Methods of High School Agriculture.—Features of agricultural science and practise best adapted to high school conditions; the best order and methods for their presentation; suiting course and instruction to the needs of the school community; what laboratory work shall be given; what apparatus may be used; what field work is practical. Practise teaching provided through cooperation with the local high school. *II;* (5).
Assistant Professor NOLAN

Prerequisite: Two years' work in agriculture.

3. Agricultural Extension Teachings.—Extension enterprises and the way in which they may be of service to the people; farmers' institutes; agricultural extension schools; farmers' clubs and cooperative work in rural communities. *II;* (1). Assistant Professor RANKIN, Mr. JAMISON

Prerequisite: Agricultural extension 4-5.

4-5. Country Life Problems.—Lectures by members of the University faculty, and by visitors; to show the relations between agriculture and the fundamental sciences, and other businesses: problems of the farm; duties of citizenship. Required of all first-year students. Credit to agricultural freshmen only. (½). Dean DAVENPORT and other lecturers, Mr. JAMISON in charge

AGRONOMY

CYRIL GEORGE HOPKINS, Ph.D., *Professor, Agronomy*
LOUIE HENRIE SMITH, Ph.D., *Professor, Plant Breeding*
JEREMIAH GEORGE MOSIER, B.S., *Professor, Soil Physics*
*JAMES HARVEY PETTIT, Ph.D., *Professor, Soil Fertility*
ORA STANLEY FISHER, B.S., *Assistant Professor, Soil Fertility.*
FREDERICK CHARLES BAUER, B.S., *Associate, Soil Fertility.*
ALBERT LEMUEL WHITING, Ph.D., *Associate, Soil Fertility*
AXEL FERDINAND GUSTAFSON, M.S., *Associate, Soil Physics*
HAROLD WILSON STEWART, B.S., *Associate, Soil Physics*
WILLIAM LEONIDAS BURLISON, M.S., *Associate, Crop Production*

*Deceased, Dec. 30, 1914.

Ira Wilmer Dickerson, B.S., *Associate, Farm Mechanics*
Karl John Theodore Ekblaw, M.S., *Associate, Farm Mechanics*
Elmer Tryon Ebersol, A.B., B.S., *Instructor, Crop Production*
Chester Otis Reed, B.S., *Instructor, Farm Mechanics*
Marvin Edward Jahr, A.B., B.S., *Instructor, Farm Mechanics*
Forrest Addison Fisher, B.S., *Instructor, Soil Physics*
Clyde Ross Newell, Ph.B., M.S., *Instructor, Farm Mechanics*
Howard John Snider, B.S., *Assistant, Soil Fertility*
Harry Charles Gilkerson, B.S., *Assistant, Soil Fertility*
Harrison Fred Theodore Fahrnkopf, B.S., *Assistant, Soil Fertility*
Warren Rippey Schoonover, B.S., *Assistant, Soil Fertility*
Orr Milton Allyn, B.S., *Assistant, Crop Production*
Edward Harvey Walworth, B.S., *Assistant, Crop Production*

Courses for Undergraduates

Crops: Agronomy 7, 8, 22, 25.
Soils: Agronomy 9, 10, 11, 12, 13, 23.
Farm Mechanics and Buildings: Agronomy 1, 2, 3, 4, 17, 19, 20, 26, 27.

1. Drainage.—Drainage and its surveying operations. Chaining, mapping, leveling, designing, setting grade stakes, laying tile. Lectures and laboratory first half semester; field work second half semester. *II;* (3). Mr. Jahr

Prerequisite: Agronomy 9 (Soil Physics), or its equivalent.

2. Field Machinery.—Construction, principles of operation, adjustment, purchase, and care of implements for soil, seed, and feed preparation, and for seeding, cultivating, harvesting, and handling farm crops. Whiffle-trees and hitches. Lectures and laboratory work including practise in troubles, adjustments, testing, and a detailed study of farm machines which receive power. *I;* (3). Mr. Reed

Prerequisite: Agronomy 26 or registration therein.

3. Farm Power Machinery.—Sources of farm power,—the horse as a motor, windmills, waterpower, steam engines, hot-air engines, electric motors—their theory, operation and economy. Internal combustion engines and tractors—methods of ignition, theory, operation, and economy. Transmission of farm power and its application to farm operation. Lectures and laboratory. (Alternating with Mechanical Engineering 71 and 73 if desired. *II;* (3). Mr. Dickerson

Prerequisite: Agronomy 26 or registration therein.

4. Farm Buildings.—Construction materials; construction, arrangement, design, and cost estimation of farm buildings, including machine sheds, granaries, cribs, silos, poultry houses, swine houses, various types of barns, and farm residences. Recitations and drafting. *I;* (3). Mr. Eckblaw

7. Advanced Farm Crops.—History and general utility of each crop; its place in systems of farming with reference to rotations, distribution of labor, cost of production, consumption of products and by-products, storage and marketing. Lectures, assigned reading, laboratory and demonstrations. (The schedule is so arranged that this course may be taken in conjunction with Agronomy 22, Plant Breeding, and students are advised to register for both courses.) *II;* (3). Mr. Burlison

Prerequisite: Agronomy 25.

8. Special Farm Crops.—Special crops in which the student is particularly interested. Assigned reading on the subject selected, experiments by pot culture in the greenhouse or by plots in the field. By special arrangement, part of this work may be done during the summer vacation. *II;**(2 to 5).

Prerequisite: Agronomy 7. Mr. BURLISON

9. Soil Physics and Management.—Origin of soil materials; methods of formation; mechanical composition and classification; moisture; texture as affecting capillarity, osmosis, diffusion, temperature, aeration, and as affected by plowing, harrowing, cultivating, rolling, and cropping; wasting by washing, fall or spring plowing and drainage as affecting moisture, temperature, and root development; real and apparent specific gravity, porosity, water holding capacity, and capillary power; the physical effects of different systems of rotation and of continuous cropping with various crops. Lectures; laboratory. *I* or *II;* (5). Professor MOSIER, Mr. GUSTAFSON, Mr. STEWART, Mr. FISHER

Prerequisite: Chemistry 2 and 3, one unit in entrance physics, and one year of university work. Regular students are urged to take Chemistry 13a previous to this course, others consult instructor.

10. Special Work in Soil Physics.—Physical properties of special soils; centrifugal analysis of such soils; field observations of the effects of discing, harrowing, and rolling; time and depths of cultivation; soil moisture and temperature; effects of washing of soils; methods of prevention. *I* or *II;* (2-5).

Professor MOSIER, Mr. GUSTAFSON, Mr. STEWART, Mr. FISHER

Prerequisite: Agronomy 9.

11. Soil Biology.—Activities of protozoa, fungi, algae, bacteria, and other forms of life occurring in the soil from the standpoint of fertility; fermentation of crop residues, green and farm manures and their effect upon insoluble plant food; fixation of atmospheric nitrogen, its transformation, assimilation, possible losses, and similar studies of the other essential elements. Lectures; laboratory. *II;* (3). Dr. WHITING

Prerequisite: Agronomy 12 and Bacteriology 5, or Bacteriology 19.

12. Soil Fertility, Fertilizers, Rotations.—The influence of fertility upon the yield of various crops; effect of different crops upon the soil and upon succeeding crops; different rotations; ultimate effect of different systems of farming upon fertility and productivity; manures and fertilizers, their composition and value; soils cropped continuously with different crops and with a series of crops; the fertility of soils of different types or classes from different sections of Illinois. Lectures; laboratory. *II;* (5).

Professor HOPKINS, Assistant Professor FISHER, Mr. BAUER

Prerequisite: Chemistry 13a; Agronomy 9.

13. Investigation of the Fertility of Special Soils.—Soils in which the student is particularly interested. Determination of the nature and quantity of the elements of fertility; effect upon various crops of different fertilizers added to the soils, as determined by pot cultures, and by plot experiments; systematic study of similar work of experiment stations and experimenters. *I;* *(2, 3, 4, 5). Professor HOPKINS, Dr. WHITING, Mr. SCHOONOVER

Prerequisite: Agronomy 12.

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*In registering for a course with variable credit hours, a student must put down on his study-list, *not* the possible hours, as shown here, but the number of hours for which *he* intends to take the course; e. g., not *2-5*, but *2*, or *3*, or *4*, or *5*.

16. German Agricultural Readings.—Soils and crops. The current numbers of German journals of agricultural science used as texts. *II;* (2).
Professor Hopkins

Prerequisite: Two years' work in German; Agronomy 12.

17. Harvesting Machinery.—Expert work on grain binders, corn binders, mowers, hay rakes, loaders, and stackers. For students preparing to do expert work on these machines in the field. Before registering in this course students should consult instructor. *II;* (3). Mr. Reed

Prerequisite: M. E. 71; Agronomy 2, and Agronomy 3, or registration therein.

18a-18b. Investigation and Thesis.—*I, II;**(5-10).
Professors Hopkins, Smith, Mosier, Dr. Whiting, Mr. Eckblaw, Mr. Dickerson

19a-19b. Research in Farm Mechanics.—Consult instructor. *I, II;* *(1-5).
Mr. Eckblaw, Mr. Dickerson, Mr. Jahr, Mr. Reed

20. Farm Concrete Construction.—Materials used in methods of mixing and placing; simple comparative tests; specifications and estimates. Lectures and laboratory. *II;* (2). Mr. Eckblaw

22. Plant Breeding.—The improvement by breeding of field crops, including grains, grasses, and legumes. Lectures, assigned reading, demonstrations and laboratory. (Schedule is so arranged that this course may be taken in conjunction with Agronomy 7.) *II;* (2). Professor Smith

Prerequisite: Botany 1; Chemistry 13a; Agronomy 25.

25. Farm Crops.—Plant growth; structure; habits and requirements; preparation of the seed bed; seed selection for productiveness; grading and fanning of grain as a means of improvement; storing; care of stored grain, market grades; judging; examination for purity; testing for vitality; weeds, identification, methods of distribution, eradication, control; diseases of crops and methods of prevention. *I* or *II;* (4). Mr. Burlison

26. Elementary Farm Mechanics.—Ropes, soldering, babbitting, belt lacing, pipe cutting, plumbing, sewage disposal, farm water systems, lighting systems, heating systems, power transmission, elementary mechanics and equalizers. Design of farm power plant. *I* or *II;* (3). Mr. Eckblaw, Mr. Newell

27. Drainage Design.—Tile drainage systems from level note data and contour maps; estimating sizes, amounts and cost of tile, and cost of system complete; outlet open ditch system for drainage districts, estimating sizes and costs; drainage district laws; preparing bids on contract jobs, advanced field work. *I;* *(1-5). Mr. Jahr

Prerequisite: Agronomy 1, or C. E. 27, 31, 33, or 76.

Courses for Graduates

Students who wish to do their major work in agronomy must have had the major courses offered in that subject to undergraduates in the college of agriculture of the University of Illinois, or the equivalent. While every one seeking a doctor's degree with agronomy as a major will be required to have a good knowledge of the whole field of agronomy, each student is expected to be espe-

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*In registering for a course with variable credit hours, a student must put down on his study-list, *not* the possible hours, as shown here, but the number of hours for which *he* intends to take the course; e. g., not *2-5*, but *2*, or *3*, or *4*, or *5*.

cially prepared in some one of the following divisions of the field: soil fertility, plant breeding, soil physics, crop production, and soil biology.

Students who are taking their major work in other departments and choose agronomy as a minor, must have had previously the work in chemistry, botany, and other fundamental sciences prescribed in the undergraduate courses for students in agronomy in the College of Agriculture, or the equivalent.

101. Soil Investigation.—A study of systems of soil investigation; sources of error and methods of control; interpretation of results. *Once a week; second semester.* Professor Hopkins

103. Soil History.—Different systems of agricultural practise and their ultimate effect upon the soil. *Once a week; second semester.* Professor Hopkins

112. Plant Breeding.—This course includes a detailed study of the experiments at this station, and of methods and results reported from other states and from foreign countries. *Twice a week; both semesters.* Professor Smith

118. Investigation.—A special problem is chosen and worked out under the advice and direction of the instructor. *One to five times a week; both semesters.* Professors Hopkins, Smith, Mosier, Dr. Whiting

ANIMAL HUSBANDRY

(Including Farm Management.)

Herbert Windsor Mumford, B.S., *Professor, Animal Husbandry*
Harry Sands Grindley, D.Sc., *Professor, Animal Nutrition*
Walter Castella Coffey, M.S., *Professor, Sheep Husbandry*
Henry Perly Rusk, M.S., *Assistant Professor, Cattle Husbandry*
James Lloyd Edmonds, B.S., *Assistant Professor, Horse Husbandry*
John A Detlefsen, D.Sc., *Assistant Professor, Genetics*
Daniel Otis Barto, B.S., *Associate, Poultry Husbandry*
Walter Frederick Handschin, B.S., *Associate, Animal Husbandry*
Walter Edward Joseph, Ph.D., *Associate, Animal Husbandry*
Sleeter Bull, M.S., *Associate, Animal Nutrition*
William Herschel Smith, M.S., *Instructor, Animal Husbandry*
James Burton Andrews, B.S., *Instructor, Animal Husbandry*
Elmer Roberts, B.S., *Instructor, Genetics*
Wilbur Jerome Carmichael, B.S., *Assistant, Animal Husbandry*
John Jonathan Yoke, B.S., *Assistant, Animal Husbandry*
Charles Ivan Newlin, M.S., *Assistant, Animal Husbandry*
Claude Harper, B.S., *Assistant, Animal Husbandry*
James Wilber Whisenand, B.S., *Assistant, Animal Husbandry*
Anton Prasil, B.S., *Assistant, Animal Chemistry*

Courses for Undergraduates

Beef Cattle: Animal Husbandry 11a, 11b.

Breeding, Feeding, Management and Marketing: Animal Husbandry 6, 28, 29, 30, 32; Farm Management 1.

General Judging: Animal Husbandry 1a, 2a, 4a, 5, 11a, 22.

Genetics: Animal Husbandry 30.

Horses: Animal Husbandry 4a, 4b, 17.

Meat: Animal Husbandry 10, 24.

Nutrition: Animal Husbandry 7, 31.
Poultry: Animal Husbandry 23.
Sheep: Animal Husbandry 1a, 1b, 25, 27.
Swine: Animal Husbandry 2a, 2b, 26.

NOTE.—Students registered in advanced courses such as 22, 28, 29, and 32, will be required to participate in a tour of inspection of representative markets, farms, herds, flocks, and studs.

1a. Sheep: Breeds and Market Classes.—Breeds extensively used for mutton and wool production; type, characteristics, and adaptability; market classes and grades of sheep and wool. Lectures; judging. *I;* (2).

Professor COFFEY, Mr. HARPER

Prerequisite: Animal Husbandry 5 or its equivalent.

1b. Sheep: Breeding, Feeding, and Management.—Pure bred and grade flocks: feeding, housing, and shepherding. Lectures; reference readings. *I;* (3).

Professor COFFEY, Mr. HARPER

Prerequisite: Animal Husbandry 5 and 6, or their equivalents.

It is advisable to take 1a and 1b simultaneously.

2a. Swine: Breeds and Market Classes.—History of the leading breeds; type, characteristics, and adaptability; market classes and grades; market reports. Lectures; judging. *II;* (2). Mr. CARMICHAEL

Prerequisite: Animal Husbandry 5, or its equivalent.

2b. Swine Husbandry.—Swine raising from the standpoint of market requirements and of economic production; breeding, housing, care, and feeding of swine for breeding purposes. *II;* (3). Mr. CARMICHAEL

Prerequisite: Animal Husbandry 5 and 6, or their equivalents.

It is advisable to take 2a and 2b simultaneously.

4a. Breeds of Horses and Market Classes of Horses and Mules.—History of the leading breeds; type, characteristics, and adaptability; market classes, grades, and requirements. Lectures; judging. *II;* (2).

Assistant Professor EDMONDS, Mr. YOKE

Prerequisite: Animal Husbandry 5, or its equivalent.

4b. Breeding, Feeding, and Management of Horses.—Methods; care of stallions, mares, and foals; of work horses and drivers at labor and idle; fattening horses for market. Lecures; assigned readings. *II;* (3).

Assistant Professor EDMONDS, Mr. YOKE

Prerequisite: Animal Husbandry 5 and 6, or their equivalents.

It is advisable to take 4a and 4b simultaneously.

5. Fundamentals of Live Stock Judging.—The names and location of external parts of the various kinds of live stock, the use of the score card, comparative judging as a method, breed identification, and types of farm animals. Required in freshman year. *I* or *II;* (3).

Professor COFFEY and members of the department

6. Principles of Feeding and Breeding.—Classification, digestibility, and functions of feed nutrients; classification and feeding values of feed stuffs; feed requirements and calculation of balanced rations for farm animals.

Organic evolution; origin and evolution of domesticated animals; history of systematic breeding; old and new theories of breeding, and their relation to Genetics. Required in sophomore year. *I* or *II;* (3). Feeding: Mr. BULL, Dr. JOSEPH, Mr. NEWLIN. Breeding: Assistant Professor DETLEFSEN, Mr. ROBERTS.

7. Principles of Animal Nutrition.—Composition and fuel value of feeding stuffs; organic and inorganic food stuffs; digestion, absorption and metabolism; elimination of metabolic products; co-efficients of digestibility and nutritive value of feeding stuffs. *I;* (3).

Professor GRINDLEY, Dr. JOSEPH, Mr. MITCHELL

Prerequisite: Animal husbandry 6 (or course formerly known as Animal Husbandry 21); Chemistry 13a.

9. Investigation and Thesis.—Before registering the student must obtain the approval of the instructor. *I* or *II;* *(5-10). Members of the staff.

10. Meat.—Curing, and care of farm butchering; yield, quality and values of meat and by-products, as related to breeding, feeding, and health of animals; classes, grades, and cuts of meat in wholesale and retail markets. *II;* (3). Professor COFFEY

Prerequisite: Animal Husbandry 5 and 6, or their equivalents.

11a. Beef Cattle.—Breeds and market classes; history of the leading breeds; beef type from the standpoint of the butcher, the feeder, and the breeder; classification and value of each grade according to current market reports. Judging; lectures; quizzes; assigned readings. *I;* (2).

Assistant Professor RUSK, Mr. SMITH

Prerequisite: Animal Husbandry 5, or its equivalent.

11b. Beef Production.—Breeding and management of pure bred herds; breeding for market; combined beef and milk production; economic factors in cattle feeding; influence of age, grade, breed, condition, and sex; equipment; pork and manure as by-products of beef production. Lectures; quizzes; assigned readings (text book). *I,* (3). Assistant Professor RUSK, Mr. SMITH

Prerequisite: Animal Husbandry 5 and 6, or their equivalents.

It is advisable to take 11a and 11b simultaneously.

15. Dairy Cattle.—(See Dairy Husbandry 2 and 16.)

[17. Education and Driving of the Horse.—Mental qualities, peculiarities, and limitations; education and training for labor or the road; correct driving; responsibilities of the driver; courtesies of the highway. Lectures; readings; practise. *II;* (2).

Not given 1914-15. Assistant Professor EDMONDS

Prerequisite: Animal Husbandry 4a and 4b; three semesters' work in the University or its equivalent.]

22. Advanced Stock Judging.—Animal conformation, quality, and condition with reference to market and show yard requirements; the selection of horses, beef cattle, sheep, and swine, for feed lot, market, and exhibition; judging at live stock shows. *I;* (3).

Professor MUMFORD and instructors in charge of prerequisite courses

Prerequisite: Animal Husbandry 1a, 2a, 4a, 11a, or their equivalents. See note, page 270.

23. Poultry: Types, Breeds, and Varieties.—Exhibiting and judging; principles of breeding; poultry houses and equipment; feeding, hatching, and brooding; market eggs and poultry; crate-fattening and dressing; diseases and their treatment. *II;* (5). Mr. BARTO

Prerequisite: Animal Husbandry 5, or its equivalent.

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*In registering for a course with variable credit hours, a student must put down on his study-list, *not* the possible hours, as shown here, but the number of hours for which *he* intends to take the course; e. g., not *2-5*, but *2*, or *3*, or *4*, or *5*.

[**24. Meat.**—Influence of type, condition, age, sex, and feeds upon the yield and market grade of meat products. *II;* *(2-5).

Not given, 1914-15. Professor Coffey

Prerequisite: Animal Husbandry 10, and 1a or 2a, or 11a, three years' work in the University, or its equivalent.]

25. Wool.—Factors affecting quality, quantity, strength, and condition. *II;* (2-5). Offered in alternate years, beginning second semester, 1915.

Professor Coffey

Prerequisite: Animal Husbandry 1a, 1b; three years' work in the University, or its equivalent.

26. Swine Husbandry.—Special problems in swine production. *II;* *(2-5).

Mr. Carmichael

Prerequisite: Animal Husbandry 2a, 2b; three years' work in the University, or its equivalent.

[**27. Sheep Husbandry.**—Factors determining the importance of the industry in leading sheep growing countries, particularly different parts of the United States. *II;* *(2-5). Offered in alternate years.

Not given, 1914-15. Professor Coffey

Prerequisite: Animal Husbandry 1a, 1b; three years' work in the University, or its equivalent.]

28. Advanced History of Breeds of Live Stock.—Horses, beef cattle, sheep, and swine. Methods of great breeders; performances and pedigrees of famous animals; breed type as exemplified in the University and other herds. Lectures; assigned readings; problems. *I;* *(3-5).

Professor Mumford and other members of the department

Breeds offered, 1914-15

Beef cattle	Shorthorns, Aberdeen Angus
Horses	Percherons, Standard breds
Swine	Berkshires, Duroc Jerseys
Sheep	Shropshires, Southdowns

Breeds offered, 1915-16

Beef cattle	Herefords, Galloways
Horses	Shires, American Saddlers
Swine	Poland Chinas, Chester Whites
Sheep	Rambouillets, Oxford Downs

Prerequisite: "a" and "b" courses in class of live stock elected. See note, page 270.

29. Systems of Live Stock Farming.—Management; climate, soil,, topography, location with reference to markets; the supply of land, labor, capital, and managing ability as factors in influencing the choice and adaptation of the various systems. Planning of farms for mixed and live stock systems. *II;* (2).

Mr. Handschin

Prerequisite: Animal Husbandry 5 and 6, and 6 hours' credit from 1b, 2b, 4b, or 11b. Farm Management 1. See note, page 270.

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*In registering for a course with variable credit hours, a student must put down on his study-list, *not* the possible hours, as shown here, but the number of hours for which *he* intends to take the course; e. g., not *2-5*, but *2*, or *3*, or *4*, or *5*.

30. Genetics.—Heredity; variation; Mendel's and Galton's Laws; dominance and segregation; gametic coupling and spurious allelomorphism; correlation; mutation theory; inheritance of acquired characters; prenatal influence; pure lines, selection, variability; modification of unit-factors. Practical application to breeding. Lectures; laboratory. *II;* (5).

Assistant Professor DETLEFSEN, Mr. ROBERTS

Prerequisite: Two years of university work, including ten hours in biology. Before registering in this course the approval of Dr. Detlefsen must be secured.

31. Principles of Animal Nutrition.—(Continuation of course 7.) Carbohydrate, fat, protein, and mineral metabolism. The income and expenditure of matter and energy. Protein, mineral, and energy requirements for maintenance, growth, and production. Lecture; recitations; laboratory. *I, II;* *(2-5).

Professor GRINDLEY, Mr. NEWLIN

Prerequisite: Animal Husbandry 7.

32. Marketing Live Stock.—Markets and methods of marketing live stock and their products. Advertising and sale of surplus pedigreed live stock. *II;* (2). Professor MUMFORD and other members of the department

Prerequisite: Two years of university work. See note, page 270. (At least 4 credits in Animal Husbandry courses 1a, 2, 4a, and 11a.)

Courses for Graduates

Students entering graduate work in Animal Husbandry should have had a thoro training in the fundamental principles of the subject either in connection with or in addition to an agricultural course of study substantially equivalent to that offered in this University.

See courses 7, 22, 24, 25, 26, 27, 28, 29, 30, 31, 32, in undergraduate list, which are also open to graduate students.

103. Live Stock Experimentation.—Objects, methods, and the sources of error in experimental work dealing with the feeding, breeding and management of farm animals. Live stock experiments at this and other experiment stations. *I, II; Once a week; (½ to 1½ units).* Professor DAVENPORT

110. Animal Nutrition.—The most recent scientific publications relating to the chemistry and physiology of the nutrition of the lower animals. The chemical and physiological changes and processes involved in the activities of animal life. Lectures; conferences; assigned readings; *I, II; three times a week; (1 unit).* Professor GRINDLEY, Dr. JOSEPH

111. Animal Nutrition.—Methods employed in the examination and analysis of feeding stuffs; also animal substances including flesh, fat, bone, urine, feces, and manufactured animal products. Lectures; conferences; assigned readings; laboratory; *I, II; Two to five times a week; (1 or 2 units.)*

Professor GRINDLEY

112. Investigation.—

(a) Economic factors involved in the various phases of meat production.

(b) Systems of live stock farming.

(c) The valuation of pedigrees.

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*In registering for a course with variable credit hours, a student must put down on his study-list, *not* the possible hours, as shown here, but the number of hours for which *he* intends to take the course; e. g., not 2-5, but 2, or 3, or 4, or 5.

(d) Animal Nutrition. A research course in Animal Nutrition including digestion and metabolism experiments and biochemical studies connected with the nutrition of farm animals.

(e) Genetics. Research problems in heredity and variation.

(a), (b), and (c), I, II; once a week; (1 to 2 units). Under the direction of Professor MUMFORD

(d), I, II; daily; (1 to 2 units). Under the direction of Professor GRINDLEY, Dr. JOSEPH

(e), I, II; Continuing throughout the summer; daily; (1 to 2 units). Under the direction of Assistant Professor DETLEFSEN

116. Seminar.—Subject for 1914-15: Food requirements for growth and the fattening of farm animals. *I, II; (¼ unit).* Members of the Staff

117. Genetics.—The more important genetic experiments; the biological and mathematical methods employed; the validity of the conclusions. Lectures; conferences; assigned readings; laboratory problems. *I, II; (1 to 2 units).*
Assistant Professor DETLEFSEN

FARM MANAGEMENT

1. Elementary Farm Management.—The factors of production in the farm business; systems of farming, their distribution, and adaptation; farm organization; the distribution of capital invested; planning of the farm; administration or operation; planning of work; handling of labor; developing management efficiency. Lectures; quiz. *II;* (3). Mr. HANDSCHIN

Prerequisite: Three semesters of required work; Economics 1 or 2.

It is also very important that the student have credit or be registered in Accountancy 11 and Agronomy 12.

ARCHITECTURE

LORING HARVEY PROVINE, B.S., A.E., *Professor*
NATHAN CLIFFORD RICKER, D.Arch., *Professor*
NEWTON ALONZO WELLS, M.P., *Professor, Architectural Decoration*
JAMES MCLAREN WHITE, B.S., *Professor of Architectural Engineering and Supervising Architect*
PERCY ASH, B.S., C.E., *Assistant Professor, Architectural Design*
WILLIAM CALDWELL TITCOMB, A.B., B.S., *Assistant Professor*
CHARLES RICHARD CLARK, B.S., *Associate, Architectural Construction*
ROBERT TAYLOR JONES, B.S., *Instructor*
JOSEPH MITCHELL KELLOGG, M.Arch., *Instructor, Architectural Design*
SAMUEL CHATWOOD BURTON, *Instructor*
ANGELO BENEDETTO MARINO CORRUBIA, B.S., M.S., *Instructor*
WILLIAM SIDNEY WOLFE, B.S., M.S., *Instructor Architectural Engineering*
WILLIAM DEWEY FOSTER, B.S., M.S., *Instructor, Architectural Design*
RALPH STANLEY FANNING, B.S., *Instructor, Architectural Design*
RALPH EDWARD MUEHLMAN, *Assistant, Architectural Design*
WILLIAM MACEY STANTON, B.S., M.S., *Assistant*
WINIFRED FEHRENKAMP, B.L.S., *Librarian*

6a-6b. History of Architecture.—From the Egyptian period to modern times; effects of political, economic and local conditions; influence of materials,

climate, structural systems, the various countries and periods; evolution of architectural forms. Illustrated lectures; quizzes. (For architectural engineers.) *I, II;* (4). Professor RICKER

Prerequisite: Sophomore standing in architecture or architectural engineering.

11a-11b. Seminar.—Assigned topics in History of Architecture; review of books; current technical journals and other publications. *I, II;* (1). Professor RICKER

Prerequisite: Registration in Architecture 6a-6b.

13, 14, 15, 16. History of Architecture.—Approximately the same as Architecture 6a-6b. (For architects.) Sophomore *I, II;* Junior *I, II;* (2). Professor RICKER

Prerequisite: Architecture 31, 32.

19a-19b. Architectural Engineering.—Graphic statics in the analysis of metallic roofs of wide span; roof trusses of curved or unusual form and those supported by abutments and jointed, spherical, and conical trussed domes; the stone arch, vault, and dome, and the Gothic system; strength of walls, dams, retaining walls, and chimneys; effect of moving loads on girders; steel skeleton buildings. Problems in design. Ricker's *Notes on Architectural Engineering. Nine hours drawing per week. I, II;* (3). Professor PROVINE, Mr. CLARK

Prerequisite: Theoretical and Applied Mechanics 20, 25, 26; Architectural Engineering 44, 46.

23-24. Freehand Drawing.—Charcoal drawing from the cast. *Six hours drawing per week. I, II;* (2). Mr. BURTON

Prerequisite: Architecture 32.

25-26. Freehand Drawing.—Charcoal, pen, pencil, and water color drawing from the cast and from still life. Out-of-door sketching. *Six hours drawing per week. I, II;* (2). Professor WELLS, Mr. BURTON

Prerequisite: Architecture 23-24.

27-28. Freehand Drawing.—Water color; original decorative composition; out-of-door sketching. *Six hours drawing per week. I, II;* (2). Professor WELLS, Mr. BURTON

Prerequisite: Architecture 25-26.

30a-30b. Advanced Architectural Engineering.—An extended problem in design or construction or an approved elective. *I,* (1); *II,* (3). Professor PROVINE, Mr. CLARK

Prerequisite: Full senior standing.

31. Architectural and Freehand Drawing.—Instruments, pen, pencil, and brush; lettering; shades and shadows; perspective. Charcoal drawing from the cast. *One lecture and ten hours drawing per week. I;* (4). Mr. MUEHLMAN, Mr. STANTON

Prerequisite: Registration in G. E. D. 2.

32. Architectural and Freehand Drawing.—Elements of architecture; walls, moldings, doors, windows, the Orders, vaults, roofs, stairs. Wash rendering, stereotomy, charcoal drawing from the cast. Lectures and sketching. *One lecture and ten hours of drawing per week. II;* (4). Mr. MUEHLMAN, Mr. STANTON

Prerequisite: Architecture 31.

33, 34. Design.—(Elementary.) Rendered order and sketch problems involving simple composition; library research in elements of composition. *Nine hours drafting room per week. I, II;* (3).

Assistant Professor TITCOMB, Mr. KELLOGG, Mr. CORRUBIA, Mr. FOSTER

Prerequisite: Architecture 31, 32.

34a. Architectural Engineering Seminar.—Current literature; written reports and discussions. *I;* (1). Professor PROVINE

Prerequisite: Senior standing.

35-36. Design.—(Intermediate.) Rendered plan and sketch problems; library research in plan and interior elements. *Fifteen hours drafting room per week. I, II;* (5). Assistant Professor TITCOMB, Mr. KELLOGG, Mr. CORRUBIA

Prerequisite: Architecture 33-34.

37. Design.—(Advanced.) Original design. *Twenty-one hours drafting room per week. I;* (7). Assistant Professor ASH

Prerequisite: Architecture 35-36.

38. Advanced Design or Thesis.—An extended original problem in design or construction. *Twenty-one hours drafting room per week. II;* (7). Assistant Professor ASH

Prerequisite: Architecture 37.

43. Working Drawings.—The growth, cutting, seasoning, working, and finishing of woods; structural and decorative properties; detailing various parts on a large scale; floors, walls, roofs, doors, windows, cornices, stairs, wainscoting, cabinet-work, interior finish; preparation of working drawings. Kidder's *Building Construction, Part II. Two lectures and four hours drawing per week. I;* (3). Mr. JONES, Mr. FANNING

Prerequisite: General Engineering Drawing 2; Architecture 31, 32.

44. Working Drawings.—Foundations of stone, brick, concrete, and piles; materials for stone masonry; their uses, defects, qualities, and preparation; kinds of masonry and external finish; tools for stone cutting; brick masonry, its materials and bonds; terra cotta design, manufacture, and use; columns, beams, girders, and footings; joints and connections. Working drawings. Kidder's *Building Construction and Superintendence. Part I. Two lectures and four hours drawing per week. II;* (3). Mr. JONES, Mr. FANNING

Prerequisite: General Engineering Drawing 2; Architecture 31, 32, 43.

45. Graphic Statics.—Application in the analysis of trussed roofs, steel and masonry arches, domes. The graphical representation of reactions, bending moments, shear and deflection in beams. (For architects.) Ricker's *Notes on Graphic Statics. One lecture and six hours drawing per week. I;* (3).

Mr. CLARK, Mr. WOLFE

Prerequisite: Theoretical and Applied Mechanics 14, 15, 16.

46. Structures.—Wooden and steel roofs; determination of section of members; design of joints; mill and steel skeleton construction. *One lecture and six hours drawing per week. II;* (3). Mr. CLARK, Mr. WOLFE

Prerequisite: Architecture 45.

55. Building Sanitation.—Plumbing, trap ventilation, removal of wastes; water closets; drains and systems of water supply; sewage disposal; water supply and fixtures in dwellings. (For architects.) Cosgrove's *Principles and Practise of Plumbing.* Recitations; lectures; designs for special problems. *I;* (1). Mr. CLARK

Prerequisite: Physics 9a-9b, 10a-10b; Architecture 43, 44.

59. Domestic Architecture.—(Given in connection with Household Science 2.) Lectures; criticism.

Assistant Professor ASH, Mr. CLARK, Mr. KELLOGG, Mr. CORRUBIA

60. Special Lectures.—Estimating. (For architects.) *One lecture per week. II;* (1). Mr. CLARK

Prerequisite: Senior standing.

65-66. Theory of Architecture.—Influence of function on architectural form; plan and elevation; problem analysis. Lectures; research; exercises. *I, II;* (1). Assistant Professor TITCOMB

Prerequisite: Architecture 33, 34.

67. Theory of Form and Color.—Arrangements; rhythm and sequence; harmony and contrast; proportion and balance. Lectures; exercises. *I;* (2). Professor WELLS

Prerequisite: Architecture 25, 26, 35, 36.

68. Specifications.—General and special clauses and their arrangement; classifying material to facilitate writing specifications. Practise in writing several sets; relations of the architect, owner, and builder; office organization; building ordinances; professional ethics. *II;* (3).

Professor PROVINE, Mr. CLARK

Prerequisite: First three years of the courses in Architecture or Architectural Engineering.

Courses for Graduates

Entrance upon graduate work in architecture presupposes the full undergraduate course in that subject. Semi-weekly conferences are held and additional instruction given in all courses as may be required.

101. Architectural Construction.—Design of special structures. *Arrange hours; I, II.* Professor RICKER, Professor PROVINE

102. Sanitation of Buildings.—The planning of sanitation, warming, and ventilation. *Arrange hours; I, II.* Professor RICKER, Mr. CLARK

103. Advanced Architectural Graphics.—Graphic statics. Unusual types of footings, columns, trusses, etc. *Arrange hours; I* or *II.*

Professor RICKER, Professor PROVINE

104. Architectural Design.—Advanced course. *Arrange hours; I* or *II.*

Assistant Professor ASH

105. Architectural Practise.—Contracts, specifications, and office methods; architectural jurisprudence. *Arrange hours; I* or *II.*

Professor RICKER, Professor PROVINE

106. Advanced Architectural History.—Special research. *Arrange hours; I* or *II.* Professor RICKER

ARCHITECTURAL ENGINEERING

31. Architectural and Freehand Drawing.—Practise with instruments, pen, pencil, and brush; lettering; orders. Charcoal drawing from the cast. (For architectural engineers.) *One lecture and ten hours drawing per week. I;* (4). Mr. FANNING, Mr. STANTON

33. Architectural Drawing.—Elements of architecture; walls, mouldings, doors, windows, shades and shadows, perspective, vaults, roofs, stairs. Wash rendering, stereotomy, charcoal, drawing from the cast. Lectures and sketching. *Nine hours drawing per week. I;* (3).

Mr. FOSTER, Mr. KELLOGG, Mr. CORRUBIA

34. Design.—(Elementary.) Rendered order problems and sketch problems; library research. *Nine hours drawing per week. II;* (3).

Mr. Foster, Mr. Kellogg, Mr. Corrubia

43. Working Drawings.—The growth, cutting, seasoning, working, and finishing of woods; structural and decorative properties; floors, walls, roofs, doors, windows, cornices, stairs, wainscoting, cabinet-work, interior finish; preparation of working drawings. (For architectural engineers.) *One recitation and three hours drawing per week. I;* (2).

Prerequisite: Architectural Engineering 31; General Engineering Drawing 2. Mr. Jones, Mr. Fanning

44. Working Drawings.—Materials for stone masonry; their uses, defects, qualities, and preparation; kinds of masonry and external finish; tools for stone cutting; brick masonry; bonds; terra cotta design, manufacture, and use; columns, beams, girders; joints and connections. Preparation of working drawings. *One recitation and three hours of drawing per week. II;* (2).

Prerequisite: Architectural Engineering 31, 43; General Engineering Drawing 2. Mr. Jones, Mr. Fanning

45. Graphic Statics.—Application in designing trussed roofs. Forces, equilibrium, reactions, moments, bending moments and shears on beams; center of gravity, moment of inertia, and kern of cross section. Stress diagrams of beams. *One recitation and six hours drawing per week. I;* (3).

Mr. Clark, Mr. Wolfe

46. Graphic Statics.—A continuation of the first semester's work. Graphical representation of the reactions, bending moments, shear and deflection in beams. Design of wood and steel roofs; determination of section members; design of joints. *One lecture or recitation and six hours drawing per week. II;* (3). Mr. Clark, Mr. Wolfe

Prerequisite: Architectural Engineering 43, 44, 45; Theoretical and Applied Mechanics 25.

58. Fireproof Construction.—Continuation of first semester's work. Types of fireproof construction; complete working drawings; investigation as to economy and advantages. *Two recitations or lectures and four hours of drawing per week; II;* (2).

Prerequisite: Thetoretical and Applied Mechanics 20, 25, 26; Architectural Engineering 45, 46, 47. Professor Provine

ART AND DESIGN

Edward John Lake, B. S., *Assistant Professor*
Mary Minerva Wetmore, *Instructor*
Charles Earl Bradbury, B.P., *Instructor*

SUMMER SESSION ONLY

Mary Hill, *Assistant*

1. Freehand Drawing.—Charcoal and pencil; perspective principles with application in free hand drawing; study of light, shadows, shade and reflections in monochrome; lectures and reference reading on graphical representation and the reproductive processes in printing. *I* or *II;* (3). Mr. Bradbury

2. Light and Shade.—Shaded drawings in monochrome in preparation for painting in oils and water colors. *II;* (2). Mr. Bradbury

Prerequisite: Art and Design 1.

3. Drawing from the Antique.—Practise drawing in monochrome from plaster models in preparation for painting the human figure; anatomical proportion, construction; composition and action in the representation of the human figure. *I* or *II;* (3). Mr. Bradbury

Prerequisite: Art and Design 1.

4a-4b. Water Color Painting.—Still-life; flowers, and landscape. *I, II;* (3). Miss Wetmore

Prerequisite: Art and Design 1, 2.

5a-5b. Drawing from Life.—Application of the human figure to pictorial and decorative purposes. *I, II;* (3). Miss Wetmore

Prerequisite: Art and Design 1, 3.

6a-6b. Portrait in Oil Colors.—Painting from costumed model; portrait and character study. *I, II;* (3). Miss Wetmore

Prerequisite: Art and Design 1, 3, 5a-5b.

7a-7b. Still-Life in Oil Colors.—Still-life, flowers, and landscape, with application to pictorial and decorative art. *I, II;* (3). Miss Wetmore

Prerequisite: Art and Design 1, 2.

8a-8b. Modeling.—Anatomical and decorative forms; the making of plaster molds and models; relative study of sculptural art. *I, II;* (3). Assistant Professor Lake

Prerequisite: Art and Design 1.

10. Sketching.—Pen, pencil; monochrome wash or charcoal rendering from landscape, still-life, and figure; requirements for reproduction. *II;* (1). Mr. Bradbury

Prerequisite: Art and Design 1.

11. Pictorial Design.—The composition and appreciation of pictures. Lectures with occasional reports. *II;* (1). Assistant Professor Lake

12. Design.—Theory and practise; the theory of pure design and the effect of material upon execution; the fitness of different forms of media for different sorts of design; space division and space relations; the theory of color; color schemes and exercises; conventionalization of natural forms for various functions; practise in execution. *I* or *II;* (2). Assistant Professor Lake

Prerequisite: Art and Design 1.

13. Design.—(Advanced.) The design of objects in the styles of different periods, and supplementing the theory of pure design with practical problems; lectures and reading on the development of historic ornament. This course is directed toward giving the student a larger vocabulary for expressing himself through design. *I* or *II;* (3). Assistant Professor Lake

Prerequisite: Art and Design 1, 12.

14. Design.—(Advanced practise.) Designs in a special field and in a medium selected by the student. *II;* (3). Assistant Professor Lake

Prerequisite: Art and Design 1, 12, 13.

19. History of the Fine Arts.—The periods and styles of architecture, sculpture, and painting before the Italian Renaissance. *I;* (2). Assistant Professor Lake

Prerequisite: One year of college work.

20. History of the Fine Arts.—The periods and styles of architecture, sculpture and painting during the Italian Renaissance and up to the present time. *II;* (2). Assistant Professor Lake

Prerequisite: One year of college work.

SUMMER SESSION COURSES

S 1. Elementary.—Form drawing from still-life, cast, and nature; outline and shading in pencil, charcoal and crayon; lectures on the principles of perspective. (2). Miss Hill

S 20. Art for the Common Schools.—The planning and execution of work in the several divisions of common-school art study; design; blackboard drawing. Lectures upon organization, equipment, and the administrative side of the supervisor's work. For supervisors of drawing and public school teachers. (2). Miss Hill

ASTRONOMY

Joel Stebbins, Ph.D., *Professor*
Frank Walker Reed, Ph.D., *Instructor*
Alexander Felix Samuels, A.B., *Research Assistant*

Instruction in astronomy is arranged both for general students and for those who desire to take up the science from its technical side. Advanced students are given every opportunity to become familiar with the use of modern astronomical instruments. The equipment of the department is contained in the Astronomical Observatory. The principal instruments are a 12-inch refracting telescope by Warner and Swazey, and Brashear, a 30-inch short focus reflector by Brashear, and a 3-inch transit and zenith telescope. There are also two smaller equatorials, two Riefler clocks, and a considerable amount of minor apparatus such as chronometers, transits, sextants, spectroscopes, photometer, photographic outfit, and calculating machines. The astronomical library comprises about 1,500 volumes, and includes the important astronomical periodicals.

Students without mathematical training may elect course 1. Course 4 is for beginners, but requires a knowledge of trigonometry. Other courses should be taken in the order: 3, 6, 15, 14, 7, 8. Advanced students in mathematics, physics, or engineering are admitted to course 15 without previous work in astronomy.

Courses for Undergraduates

1. Elementary Astronomy.—Lectures; recitations; one evening a week at the observatory. (For beginners; mathematics not required.) *I;* (3). Professor Stebbins

3. General Astronomy for Engineers.—Descriptive astronomy; required with course 6. *II;* (3). Professor Stebbins
Prerequisite: Mathematics 7.

4. General Astronomy.—Lectures; recitations; two evenings a week at the observatory. *II;* (5). Dr. Reed
Prerequisite: Mathematics 4.

6. Practical Astronomy.—Rough and accurate determination of latitude, azimuth, and time, especially with the ordinary surveyor's transit; the art of computing. *II;* (2). Professor Stebbins
Prerequisite: Mathematics 7.

For Advanced Undergraduates and Graduates

7-8. Theoretical Astronomy.—Celestial mechanics; theory of orbits; perturbations; canonical transformations. *I, II;* (3). Dr. Reed
Prerequisite: Mathematics 9.

9-10. Celestial Mechanics.—Properties of canonical systems of differential equations; integration by series; periodic and asymptotic solutions; integral invariants. *I, II;* (3). Dr. Reed

Prerequisite: Mathematics 16; Astronomy 7-8.

14. Observatory Astronomy.—The working methods of an astronomical observatory; individual problems. *II;* (3). Professor Stebbins

Prerequisite: Astronomy 15.

15. Geodetic Astronomy.—The sextant, transit, and zenith telescope; methods similar to those of the United States Coast Survey. *I;* (3). Professor Stebbins

Prerequisite: Mathematics 7 or 8.

Courses for Graduates

101. Seminar and Thesis.—*Three times a week; I, II; (1 unit).* Professor Stebbins

102. Stellar Astronomy.—Orbits of binary stars; variable stars; theoretical photometry. *Three times a week; I, II; (1 unit).* Professor Stebbins

BACTERIOLOGY

(See also Botany)

Joel Andrew Sperry, 2d, Ph.D., *Instructor*
Laurence Vreeland Burton, M.S., *Assistant*
Joseph Charles Winslow, B.S., *Graduate Assistant*

Courses for Undergraduates

5. Introductory Bacteriology.—Morphology and physiology of bacteria and related microorganisms; technique of cultivation and observation. *I* or *II;* (5). Dr. Sperry, Mr. Burton

Prerequisite: Chemistry 3; junior standing.

6. Bacteriology for Sanitary Engineers.—Methods of water analysis. *I;* (2). Dr. Sperry

Courses for Advanced Undergraduates and Graduates

8. Applied Bacteriology.—Decay of organic matter in nature; soil and sewage bacteria; food bacteria; water bacteria; pathogenic bacteria and identification of organisms. *II;* (5). Mr. Burton

Prerequisite: Bacteriology 5; Chemistry 9, or the equivalent.

18a-18b. Journal Meeting in Bacteriology.—Required of all students specializing in bacteriology. *I, II;* (1). Dr. Sperry

Prerequisite: Bacteriology 5.

19. General Bacteriology.—For graduate students in science. *I* or *II; (1 unit).* Dr. Sperry, Mr. Burton

26. Pathological Bacteriology.—The disease-producing organisms; their effects upon the animal and the reaction of the host. Lectures and laboratory. *II;* (3). Dr. Sperry

Prerequisite: Bacteriology 5; Physiology 1.

27. Epidemiology.—Transmission and the methods of prevention and control of infectious diseases. *I;* (2). Dr. Sperry

Prerequisite: Bacteriology 5.

Courses for Graduates

The work here outlined is open only to graduate students who have had at least one year's work in bacteriology and satisfactory training in chemistry.

103. Physiology of Bacteria.—The facts and theories of fermentation and growth and death of bacteria. *I; (1 unit).* Dr. Sperry

105. Classification of Bacteria.—Variability of species; characters; mutations; standard and biometrical classifications. *II; (1 unit).* Dr. Sperry

107. Research in Bacteriology.—The physiology of bacteria and food bacteriology. *I, II; (1 or 2 units).* Dr. Sperry

BANKING

(See Economics)

BIOLOGY

(See Botany, Entomology, Physiology, and Zoology)

BOTANY

William Trelease, Sc.D., LL.D., *Professor*
Thomas Jonathan Burrill, Ph.D., LL.D., *Professor, Emeritus*
Charles Frederick Hottes, Ph.D., *Professor*
Frank Lincoln Stevens, Ph.D., *Professor*
Stella Mary Hague, Ph.D., *Instructor*
Walter Byron McDougall, Ph.D., *Instructor*
Joel Andrew Sperry, 2d, Ph.D., *Instructor (Bacteriology)*
Rosalie Mary Parr, A.M., *Assistant*
Ernest Michael Rudolph Lamkey, A.M., *Assistant*
Lawrence Vreeland Burton, M.S., *Assistant (Bacteriology)*
Harry Dwight Waggoner, A.M., *Assistant*
Nora Elizabeth Dalbey, A.M., *Assistant*
Forrest Ellwood Kempton, M.S., *Assistant*
Bert Edwin Quick, A.B., *Assistant*
Cyrus William Lantz, A.M., *Assistant*
Joseph Charles Winslow, B.S., *Graduate Assistant (Bacteriology)*
William Eugene Pickler, A.B., *Graduate Assistant*
Robert Lesley Davis, B.S., *Graduate Assistant*

Courses offered are of four types: the first intended to meet the needs of beginners; the second laying a foundation for methods of accuracy in observation, manipulation, and experimentation through the study of some fundamentally important subdivisions of the science; the third giving practise in methods of investigation by the study of advanced problems varied to suit the needs and interests of the student; and the fourth teaching independent research by means of thesis subjects leading to the discovery of new facts or laws.

The work of any semester may be credited separately except when a problem is left incomplete in one of the courses open to graduates.

For the convenience of undergraduates in the College of Liberal Arts and Sciences who elect major work in botany the following combinations of courses are suggested:—(a) General; 2a, 3b, 4a, 14; (b) Specializing in morphology; 2a, 2b, 3a, 4a, 4b, or 4c; (c) Specializing in pathology; 2a or 3a, **7a, 7b, 16,** 4a, or 17; (d) Specializing in physiology; 2b, 3a, 3b, 9a, or 9b; (e) Specializing

in taxonomy; 2a, 4a or 4b or 4c, 14, 16 or 17. Students taking botany as a foundation for agronomy are advised to select courses 1, 3a, 3b, 4b, 7, and advanced work on some special topic or topics under courses 9, 15, or 17.

Candidates for the master's degree with botany as a major subject are expected to possess a general familiarity with the science as outlined in the collective courses offered primarily for undergraduates, in addition to doing more specialized graduate work.

Courses open for credit to graduates presuppose an earnest interest in the work and sufficient preliminary training to insure initiative and intelligence in its prosecution under direction or, in the more advanced research courses, with general guidance and stimulative supervision only. Each such course includes weekly seminar conferences as an integral part of its plan, and a collective monthly conference brings together all students enrolled in this entire group of electives. Those who take such courses are advised to register also for course 10, the weekly meeting devoted to current literature in botany, which is obligatory for candidates for an advanced degree with botany as a major subject.

Courses for Undergraduates

1. General Botany.—The structure, physiology, natural history and uses of plants; reading, quizzes, and laboratory work, adapted to the needs of students in the College of Liberal Arts and Sciences and the College of Agriculture. *When possible students are advised to precede it by elementary chemistry. I* or *II;* (5). Professor TRELEASE, Dr. MCDOUGALL and assistants

2a. Morphology of Thallophytes.—Comparative study of types of the lower plants.

This and the following course are intended to give personal acquaintance with the vegetable kingdom through the study of living types selected so as to present in natural sequence the increasing complexity of structure and function which marks evolutionary development. *I;* (5). Dr. HAGUE

Prerequisite: Botany 1.

2b. Morphology of Cormophytes.—A comparative laboratory study of selected types of the higher plants. *II;* (5). Dr. HAGUE

Prerequisite: Botany 1.

3a. Plant Anatomy, Histology, and Technique.—Plant structure; protoplasts and their parts; behavior and relations of the nucleus; the best methods of fixing, sectioning, staining and examining tissues; modeling from serial sections and photomicrography. *I;* (5). Professor HOTTES

Prerequisite: Botany 1.

3b. Plant Physiology.—A course preparatory to work in forestry and horticulture, crop judging, and other branches of agronomy. *II;* (5). Professor HOTTES

Prerequisite: Botany 1.

4. The Local Flora.—Morphology, ecology, identification, and classification of wild plants. *I;* (3). Dr. HAGUE

Prerequisite: Entrance botany or its equivalent, and sophomore standing.

4a. Taxonomy of Cormophytes.—Structure, identification and classification of higher plants.. Flowering plants, weeds, poisonous plants and the more commonly cultivated species. *II;* (5). Professor TRELEASE

Prerequisite: Botany 1.

4b. Taxonomy of Algae and Bryophytes.—Structure, identification, and classification. *II;* (5). Dr. HAGUE

Prerequisite: Botany 1.

4c. Taxonomy of Fungi.—Structure, identification, and classification. *II;* (5). Professor STEVENS

Prerequisite: Botany 1.

4d. Trees and Shrubs of the Campus.—Woody plants used for decorative purposes. *I;* (3). Professor TRELEASE

7a-7b. Plant Pathology.—Casual agents, symptoms, morbid histology, diagnosis, and treatment, and methods of study. *I, II;* (5). Professor STEVENS

Prerequisite: Botany 1; and 7a for the second semester.

20. Plant Diseases.—(For credit in the College of Agriculture only.) The most conspicuous diseases of commonly cultivated plants; diagnosis and treatment. Lectures and laboratory. *I;* (3). Professor STEVENS

Prerequisite: Botany 1.

For Graduates and Advanced Undergraduates

9a-9b. Plant Anatomy or Physiology.—Problems in anatomy with technique, or physiology, or in the application of these to medicine, plant breeding, crop production, forestry, etc. *I, II;* *(3 or 5). Professor HOTTES

Prerequisite: 10 hours of botany, including course 3a or 3b, and junior standing.

14a-14b. Heredity, Variation, Evolution.—The cells and members of plants; their adaptations and changes; the mechanism of heredity, and of the process of evolution. *I, II;* (3). Professor HOTTES

Prerequisite: 10 hours of botany, or 5 hours each of botany and zoology, and junior standing, and 14a for the second semester.

15a-15b. Plant Pathology.—Study of the particular branch of pathology or group of pathogens in which student is interested, as follows: 1. Special groups of casual agents as: rusts, smuts, powdery mildew, air, soil, water condition, etc.; 2. Special host groups as: orchard crops, timber crops, truck crops, ornamental crops, etc.; 3. Enzymes and toxins; 4. Physiological diseases; 5. Resistance and susceptibility; immunity; 6. The host reaction. *I, II;* *(3 or 5). Professor STEVENS

Prerequisite: 10 hours of botany, including 7a, and junior standing.

16a-16b. Taxonomy and Ecology of Thallophytes.—Selected groups: (1), Algae and Bryophytes; (2) Fungi. *I, II;** (3 or 5).

1, Dr. HAGUE; 2, Professor STEVENS

Prerequisite: 10 hours of botany, including either course 2a or 4b for Algae and Bryophytes, or 4c or 7a for Fungi, and junior standing.

17a-17b. Taxonomy and Ecology of Cormophytes.—Selected taxonomic, ecological or economic groups. Specialized studies, as of genera or families of Illinois plants, ecological association or adaptations, or plants economically important as weeds, forest resources, adjuncts to medicine, farm, orchard or garden crops, or as the basis of floriculture, landscape architecture, street shading or other decorative planting. *I, II;* *(3 or 5). Professor TRELEASE

Prerequisite: 10 hours of botany, including course 4 or 4a, and junior standing.

*In registering for a course with variable credit hours, a student must put down on the study-list, *not* the possible hours, as shown here, but the number of hours for which *he* intends to take the course; e. g., not *2-5*, but *2*, or *3*, or *4*, or *5*.

10a-10b. Current Botanical Literature.—A weekly review covering the field of botany; supplementary to the various seminar conferences. *I, II;* (1).
Professors Trelease, Hottes, Stevens; Dr. Hague

Prerequisite: Concurrent taking of some course in botany open for graduate credit.

Courses for Graduates

The work here outlined is open only to those who have had satisfactory botanical training including at least one year of successful study in the particular line in which it is desired further to specialize. These courses may be elected for minor or for major work.

101. Cytology.—The influence of external agents on the cell. Special subjects for investigation are assigned upon consultation. Reports and discussions of current literature and research results. *I, II; (1 or 2 units).*
Professor Hottes

102. Physiology.—The effects of external stimuli on growth and movement. Special subjects for investigation are assigned upon consultation. Reports and discussions of current literature and research results. *I, II; (1 or 2 units).*
Professor Hottes

104. Mycology.—Field and laboratory investigations upon selected groups of fungi. Individual assignments of subjects and problems. *I, II; (1 or 2 units).*
Professor Stevens

106. Plant Pathology.—Diseases and disease agents. Special subjects are assigned upon consultation. *I, II; (1 or 2 units).*
Professor Stevens

108. Taxonomy.—Monographic studies of critical groups. *I, II; (1 or 2 units).*
Professor Trelease

SUMMER SESSION COURSES

S 2. Flowerless Plants.—Field and laboratory study of the morphology, classification and ecological relations of selected types. (2½). Dr. Hague

Prerequisite: Entrance botany or Botany 1 or 11.

S 4. Flowering Plants.—Morphology, organography, naming, classification and ecology of local field flora.
Professor Trelease

Prerequisite: Entrance botany or Botany 1 or 11.

***S 16. Lower Plants.**—Field, laboratory and herbarium work and assigned reading, on special groups. (Time and credit arranged.) Dr. Hague

Prerequisite: Ten hours of botany and junior standing.

***S 17. Higher Plants.**—Special morphology, vegetative ecology, pollination and seed dispersal, with thesis. Field work and assigned reading.
Professor Trelease

Prerequisite: Ten hours of botany and junior standing.

CERAMICS

Ray Thomas Stull, E.M., *Acting Director*
Ralph Kent Hursh, B.S., *Instructor*
Barney S. Radcliffe, M.S., *Instructor*
Arthur Edwards Williams, B.S., *Instructor*
Ralph Raymond Danielson, B.S., *Assistant*

The courses offered by the department of ceramics are designed to give a technical knowledge of the composition and properties of materials used in the

manufacture of clay wares, cements, enamels, and glasses, and of the physical and chemical changes which they undergo during manufacture; and to acquaint the student with machinery, application of power, and the construction and operation of plants. Advanced students are permitted to take part in these investigations carried on under direction of the instructors. Seniors and graduate students are expected to conduct investigations of their own in some line of work in which they are especially interested.

1. Ceramic Materials.—The properties of clays and other ceramic materials; the identification of the varieties met in practical work. Lectures; laboratory. *II;* (3). Mr. Hursh, Mr. Williams

Prerequisite: Chemistry 2, 3.

2. Winning and Preparation of Clays.—Methods, machinery, and costs. *I;* (3). Mr. Radcliffe

Prerequisite: Chemistry 5b.

3. Industrial Calculations.—Chemical and physical calculations applying to the operation of furnaces, kilns, and dryers; temperature measurements; ceramic stoichiometry. *I;* (3). Mr. Hursh, Mr. Williams

Prerequisite: Mathematics 8; Chemistry 5b; Physics 1a-1b and 3a-3b.

4. Drying and Burning.—Clay wares; types of construction of industrial dryers and kiln plants; chemical and physical processes involved. *I;* (4). Mr. Stull

Prerequisite: Ceramics 1, 3.

5. Ceramic Bodies.—Composition; physical and chemical changes produced by the blending of various clays with other ceramic materials; methods of shading. Lectures; laboratory. *II;* (5). Mr. Radcliffe

Prerequisite: Ceramics 1 and 3.

6. Glazes.—Production of glazes and enamels; limits of composition; classification; properties and defects common to each class; effect of variation in composition; modes of application. Lectures; laboratory. *I;* (5). Mr. Stull

Prerequisite: Ceramics 3, 5; registration in Ceramics 4.

8. Glass.—Raw materials, preparation, compounding, melting, and shaping; chemical principles involved in the manufacture and decoration of the various types of vitreous silicates. Lectures. *II;* (2). Mr. Stull

Prerequisite: Ceramics 3, 6.

9. Ceramic Construction.—Plans, specifications, and estimates for ceramic equipments and industrial plants. *II;* (4). Mr. Stull, Mr. Hursh

Prerequisite: G. E. D. 2; Ceramics 3, 4.

10. Cements.—Cements, limes, plasters; composition; reactions; methods of manufacture and testing. *I;* (3). Mr. Hursh

Prerequisite: Ceramics 3.

11. Thesis.—*II;* (5). Mr. Stull, Mr. Hursh

12. Designing and Shaping.—The standpoint of the manufacturer; die construction; templates; master and working molds for pressing, casting, and jiggering. *II;* (3). Mr. Radcliffe

Prerequisite: Ceramics 1.

13. Cement Laboratory.—Preparation of cementing substances, study of properties and reactions involved. *II;* (3). Mr. Hursh

Prerequisite: Ceramics 10.

15. Glass Laboratory.—Soda-lime, potash-lime, lead, barium, and zinc silicates; boro-silicates; properties of fused and solidified glasses; practical glass problems. *I;* (3). Mr. Stull

Prerequisite: Ceramics 8.

16. Glasses and Enamels.—Continuation of Ceramics 15. Opaque, colored, and optical glasses; enameling of metals. *II;* (3). Mr. Stull

Prerequisite: Ceramics 15.

17. Silicates.—Formation and properties; experimental methods. *II;* (3). Mr. Hursh

Prerequisite: Ceramics 1, 3.

CHEMISTRY

William Albert Noyes, Ph.D., LL.D., *Professor and Director*
Samuel Wilson Parr, M.S., *Professor*
Harry Sands Grindley, D.Sc., *Professor*
Edward Bartow, Ph.D., *Professor*
Clarence William Balke, Ph.D., *Professor*
Edward Wight Washburn, Ph.D., *Professor*
David Ford McFarland, Ph.D., *Assistant Professor*
George McPhail Smith, Ph.D., *Assistant Professor*
Clarence George Derick, Ph.D., *Assistant Professor*
Henry Charles Paul Weber, Ph.D., *Assistant Professor*
Duncan Arthur MacInnes, Ph.D., *Associate*
George Denton Beal, Ph.D., *Associate*
B Smith Hopkins, Ph.D., *Associate*
Lambert Thorp, Ph.D., *Instructor*
Charles George MacArthur, A.M., *Instructor*
Henry John Broderson, Ph.D., *Instructor*
Charles Henry Hecker, Ph.D., *Instructor*
George Wallace Sears, Ph.D., *Instructor*
Hubert Leonard Olin, Ph.D., *Instructor*
Edward Otto Heuse, Ph.D., *Instructor*
Jessie Yeoreance Cann, Ph.D., *Instructor*
Bronislav Roman Honovski, Ph.D., *Research Assistant*
Henry Joseph Weiland, B.S., *Research Assistant*
Harry Peach Corson, M.S., *Assistant*
Oliver Kamm, M.S., *Assistant*
Bert Stover Davisson, A.B., *Assistant.*
Edgar Wallace Engle, M.S., *Assistant*
John William Read, M.S., *Assistant*
Ernest Atkins Wildman, M.S., *Assistant*
Raymond Washington Hess, A.B., *Assistant*
Scott Champlin Taylor, B.S., *Assistant*
Edward Wichers, A.B., *Assistant*
Theodore Rally Ball, M.S., *Assistant*
Howard DeWitt Valentine, B.S., *Assistant*

Harry Cleveland Kremers, A.B., *Assistant*
Ross Earlby Gilmore, A.B., *Research Assistant*
Juanita Elizabeth Darrah, A.B., *Assistant*
William Asbury Manuel, A.B., *Assistant*
Ernest Edward Charlton, A.B., *Assistant*
Edwin Arthur Rees, A.M., *Assistant*
Paul Anders, *Assistant, Glass Blowing*
Steward Dent Marquis, A.B., *Graduate Assistant*
Everett Harvey Taylor, A.B., *Graduate Assistant*
Ralph Waldo Tippet, A.B., *Graduate Assistant*
Henry Lester Gerry, A.M., *Graduate Assistant*
Glenn Seymour Skinner, A.B., *Graduate Assistant*
Silas Alonzo Braley, A.B., *Graduate Assistant*
Jay Thomas Ford, A.B., *Graduate Assistant*
Axel Magnus Hjort, A.B., *Graduate Assistant*
Terrence Onas Westhaefer, A.B., *Graduate Assistant*
Albert Durand Shepard, B.S., *Graduate Assistant*
Reuben Winfield Allen, M.S., *Graduate Assistant*
Carl Nathan Davidson, A.B., *Graduate Assistant*
Don Warren Bissell, B.S., *Graduate Assistant*
Paul Marshall Dean, A.M., *Graduate Assistant*
Clarence Barbre, B.S., *Graduate Assistant*
James Burleigh Lucas, M.S., *Graduate Assistant*
Henry Rhodes Lee, A.B., *Graduate Assistant*
Ernest Henry Vollweiler, A.B., *Graduate Assistant*
Walter Gerald Karr, B.S., *Graduate Assistant*

Students taking chemistry at the University are advised to give at least one year to the subject, and this should include Chemistry 1 or 1a, 2, and 3. Those continuing in the second year should take Chemistry 5a and 5b, 5c or 13a. In the third year Chemistry 14 or 9, 9a, and 9b, or 9c, 31, and 33, should be taken. With these, more special courses may be taken if desired, but, in general, students are not advised to take the special courses unless they have had the fundamental work represented by the selection given above. Students who desire a training for professional work in chemistry, either as teachers or in its industrial application, will naturally take the chemical course or the course in chemical engineering.

Students who find it impossible to take more than one semester's work are requested to register for Chemistry 1 or 1a in the second semester rather than in the first.

A major in chemistry shall consist of twenty hours in chemistry, exclusive of the first semester's work, and shall include courses in quantitative analysis and organic chemistry.

Students who major in chemistry may offer a minor made up of approved courses from the following departments: Botany, Ceramics, Geology, Household Science, Mathematics, Physics, Physiology, Zoology.

1. Inorganic Chemistry.—The non-metallic elements. Noyes's *Textbook of Chemistry*. *I* or *II;* (5). Professor Balke in charge

1a. Inorganic Chemistry.—Lectures; recitations; laboratory. *I* or *II;* (4).
Professor BALKE in charge

Prerequisite: One year of entrance chemistry.

1b. Inorganic Chemistry.—Lectures; recitations; laboratory. (For students in engineering.) *I* or *II;* (4). Professor BALKE in charge

2. Inorganic Chemistry.—A continuation of Chemistry 1. The metallic elements; their classification, compounds, and chemical properties. Lectures; assigned text. Noyes's *Textbook of Chemistry. I* or *II;* (2).
Professor BALKE in charge

Prerequisite: Chemistry 1; registration in Chemistry 3.

3. Qualitative Analysis.—Recitations; laboratory. *I* or *II;* (3).
Assistant Professor WEBER in charge

Prerequisite: Chemistry 1; registration in Chemistry 2.

4. Qualitative Analysis and Chemistry of the Metallic Elements.—Class and laboratory work. (For students in engineering.) *I;* (4).
Assistant Professor WEBER in charge

Prerequisite: Chemistry 1a or 1b.

5a. Elementary Quantitative Analysis.—Gravimetric and volumetric analysis; stoichiometrical relations and the application of the fundamental laws of chemistry to quantitative analysis. Lectures; recitations; laboratory. Talbot's *Quantitative Chemical Analysis. I, II;* (5).
Assistant Professor SMITH, Dr. BEAL, Dr. OLIN

Prerequisite: Chemistry 2, 3.

5b. Quantitative Analysis.—Continuation of 5a. The analysis of silicates, metallic compounds, and alloys; advanced qualitative analysis. Lectures; recitations; laboratory. Treadwell-Hall, *Analytical Chemistry,* Vol. II. *II;* (5).
Assistant Professor SMITH, Dr. OLIN

Prerequisite: Chemistry 5a.

5c. Food Analysis.—Quantitative organic analysis, with special reference to the examination of food and drug products; alcohols, carbohydrates, fats and oils, nitrogenous bodies, preservatives and colors. The origin and composition of food materials. Sherman's *Organic Analysis: Bulletin 107 (rev.) U. S. Bureau of Chemistry;* Sherman's *Food Products. II;* (3 to 5).
Dr. BEAL

Prerequisite: Chemistry 5a or 13a; 9 or 14a-14b.

5d. Elementary Quantitative Analysis for Mining Engineers.—Gravimetric and volumetric analysis; stoichiometrical relations and the application of the fundamental laws of chemistry to quantitative analysis. Lectures; recitations; laboratory. Talbot's *Quantitative Chemical Analysis. I;* (4).
Assistant Professor SMITH, Dr. OLIN

Prerequisite: Chemistry 2, 3; or chemistry 4.

6*. Chemical Technology.—Technological chemistry as illustrated in those industries having a chemical basis for their principal operations and processes; trade journals. Lectures; recitations. Rogers and Aubert's *Industrial Chemistry. II;* (2). Assistant Professor MCFARLAND

Prerequisite: Chemistry 5a and 14a-14b.

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*Certain required inspection trips will be arranged in connection with courses 6 and 7. Students registered in these courses should take into consideration the expense involved, which will approximate $15.00 for each course.

7*. Metallurgy.—General metallurgy; iron and steel; the non-ferrous metals. Lectures; assigned reading; recitations. Fulton's *Principles of Metallurgy;* Stoughton's *Iron and Steel. I;* (3). Assistant Professor McFarland

Prerequisite: Chemistry 5a.

Senior students in engineering courses may be admitted without this prerequisite by special arrangement.

[8. Iron and Steel Analysis.—Analyses of all the constituents by both rapid, or technical, and standard methods. *II;* (3).

Not given 1915-16. Assistant Professor Smith

Prerequisite: Chemistry 5b.]

9. Organic Chemistry.—The characteristics of the more typical and simple organic compounds; the important classes of derivatives of carbon. (For students of the medical preparatory and household science courses and others desiring a short course.) *II;* (3). Assistant Professor Derick

Prerequisite: Chemistry 3.

9a. Organic Synthesis and Ultimate Analysis.—Ultimate organic analysis; preparation of typical organic compounds. Laboratory. *I* or *II;* (2).

Assistant Professor Derick in charge

Prerequisite: Registration in chemistry 14a-14b, or equivalent.

9b. Organic Synthesis and Qualitative Organic Analysis.—Continuation of 9a, to accompany Chemistry 14b. *I* or *II;* (2).

Assistant Professor Derick in charge

Prerequisite: Chemistry 9a; registration in Chemistry 14b, or equivalent.

9c. Organic Synthesis.—Typical organic compounds. Laboratory. (For students in the medical preparatory and household science courses and others desiring a brief course.) *II;* (2). Assistant Professor Derick in charge

Prerequisite: Chemistry 3; registration in Chemistry 9, or equivalent.

10a. Water Chemistry.—The history, sources, contamination, and standards of purity of potable waters and waters for industrial purposes. Lectures; practise in analytical methods. *II;* (3). Professor Bartow, Mr. Corson

10b. (A modification of 10a to meet the requirements of students in sanitary engineering, registered in connection with Chemistry 2 and 3.) *II;* (2½). Professor Bartow, Mr. Corson

11a-11b. Research.—Thesis embodying a thoro review of the literature of the subject; account of work done in the laboratory. The subject should be determined upon and reading begun in the junior year. A minimum of five semester hours is required. (Required for seniors.) *I, II;* (5).

Professor Noyes in charge

13a. Elementary Quantitative Analysis.—Gravimetric and volumetric analysis, including fertilizer and milk analysis. Lectures; recitations; laboratory. Talbot's *Quantitative Chemical Analysis.* (For students in agriculture, medicine, and household science.) *I, II;* (5).

Assistant Professor Smith, Dr. Beal, Dr. Olin

Prerequisite: Chemistry 2, 3.

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*Certain required inspection trips will be arranged in connection with courses 6 and 7. Students registered in these courses should take into consideration the expense involved, which will approximate $15.00 for each course.

13b. Advanced Agricultural Analysis.—Applied quantitative analysis. The analysis of fungicides, limestone, phosphate rock, fuel, and water; determination of the alkali metals; special methods of agricultural analysis. Treadwell-Hall, *Analytical Chemistry,* Vol. II. (For students who wish to specialize in agricultural chemistry or agricultural experiments.) *II;* (5).

Dr. Beal in charge

Prerequisite: Chemistry 5a or 13a.

14a-14b. Organic Chemistry.—Lectures; recitations. Noyes's *Organic Chemistry. I, II;* (3). Professor Noyes

Prerequisite: Chemistry 5a; should be accompanied by Chemistry 9a and 9b. (Students who have taken Chemistry 9 can not take Chemistry 14a for credit, but may receive credit for 14b.)

15. Physiological Chemistry.—Enzymes; carbohydrates; salivary digestion; gastric digestion; fats; pancreatic-digestion; intestinal digestion; bile; putrefaction products; feces; blood; milk; epithelial and connective tissues; muscular tissue; nervous tissue; urine. Qualitative and quantitative work on gastric juice, blood, urine, and milk; the clinical aspects of these topics treated thoroughly for prospective students of medicine. Lectures; demonstrations; conferences; practical work; assigned reading. Hammarsten's *Text Book of Physiological Chemistry;* Hawk's *Practical Physiological Chemistry.* (Open to graduates and undergraduates.) *I;* *(5 or 7). Mr. MacArthur

Prerequisite: Two years' work in chemistry.

15a.—Problems of Metabolism.—Colloids; animal oxidations; osmosis; adsorption; selective activity of cells; metabolism; activities of gastro-intestinal tract; enzymes; inorganic nutrition. Lectures; demonstrations; conferences. *I;* (2). Mr. MacArthur

Prerequisite: Chemistry 15.

16. Chemistry for Engineers.—The proximate analysis of coal; determination of calorific power; technical analysis of furnace gases; examination of boiler waters; lubricating oils. *II;* (3). Professor Parr, Dr. Broderson

Prerequisite: Chemistry 1.

17. Teachers' Course.—Methods of teaching elementary chemistry. *;* (1). Professor Balke

21. Qualitative Organic Analysis.—Systematic methods for identification of pure organic compounds and mixtures. *I* or *II;* (2).

Assistant Professor Derick

Prerequisite: Chemistry 9a, 9b.

22. Animal Chemistry (Animal Nutrition).—The chemical composition of animal products and feeding stuffs. Lectures; conferences; assigned reading; laboratory. *I* or *II;* (5). Professor Grindley

Prerequisite: Two years' work in chemistry.

27. Qualitative Analysis of the Rare Elements.—Identification and separation; formation, solubilities, and chemical reactions of their salts. Assigned reading; laboratory. *II;* (3). Professor Balke

Prerequisite: Two years' work in chemistry.

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*In registering for a course with variable credit hours, a student must put down on his study-list, *not* the possible hours, as shown here, but the number of hours for which *he* intends to take the course; e. g., not *2-5*, but *2*, or *3*, or *4*, or *5*.

31. Elementary Physical Chemistry.—Important principles of physical chemistry and electro-chemistry; problems. Lectures; recitations. Washburn's *Principles of Physical Chemistry.* *II;* (3). Professor WASHBURN

Prerequisite: Chemistry 1, 2, 3; Physics 1a-1b or 7a-7b; Mathematics 8.

33. Elementary Physical Chemistry.—Molecular weight of gases and solutions; chemical equilibrium; the electrical conductivity of solutions and the attendant phenomena within the solution; thermochemistry. (Laboratory to accompany course 31.) *II;* (2). Dr. MACINNES, Dr. HEUSE

Prerequisite: Chemistry 5a; Physics 8a-8b or 3a-3b.

35. Electrochemistry.—(A continuation of Chemistry 31. See also Chemistry 102b.) Theory and applications. Lectures, recitations, laboratory. Allmand's *Applied Electrochemistry.* *I;* (3). Dr. MACINNES

Prerequisite: Chemistry 31, 33.

36. The Phase Rule and Its Applications.—A study of equilibria in heterogeneous systems. Lectures and seminar. *II;* (2). Dr. HECKER

Prerequisite: Chemistry 31, 33; Mathematics 8 or 7 and 9.

61. Industrial Chemical Laboratory.—The preparation and purification of chemical products from raw materials on a scale sufficient to afford data for determining the economy of the processes employed. Typical forms of chemical machinery such as filter presses, vacuum pan, centrifugal separators, steam jacketed kettles, etc.; reports and estimates upon apparatus and plant for the production of some particular product on a commercial scale. (Should be accompanied by either Chemistry 6 or 109.) *II;* (2).

Assistant Professor MCFARLAND

Prerequisite: Chemistry 5a and 14a-14b.

65. Technical Gas and Fuel Analysis.—Examination of gases, gas mixtures, flue gases, and fuels; determination of calorific values; calculation of efficiencies. *I;* (2). Professor PARR, Dr. BRODERSON

Prerequisite: Chemistry 5a.

66. Technology of Gases.—The manufacture, constituents, and uses of the various forms of gaseous fuel; calorimetry; photometry; the more exact methods of analysis. Lectures; reading; reports; laboratory. *II;* (1).

Dr. BRODERSON

Prerequisite: Chemistry 65.

69. Metallurgical Laboratory and Assaying.—The fire assay of gold, silver, lead, and copper ores, mattes, and bullion; the underlying metallurgical principles; fluxes, slags, and charge calculations; practise in the use of coal, oil, and gas furnaces, and in the measurement of high temperatures. Fulton's *Manual of Fire Assaying.* *I;* (2). Assistant Professor MCFARLAND

Prerequsite: Chemistry 5a; Geology 5.

70. Advanced Assaying and Ore Testing.—Platinum, tin, copper; bullion assay; free milling, amalgamation, and cyaniding tests. (A continuation of Chemistry 69.) *II;* (2). Assistant Professor MCFARLAND

Prerequisite: Chemistry 69.

71. Advanced Methods of Metallurgical Analysis.—Comparison of methods of analysis of ores, alloys, and metallurgical products. Laboratory. *I;* (2). Assistant Professor MCFARLAND

Prerequisite: Chemistry 5b.

72. Paints, Oils, Turpentines, Varnishes, and Protective Coverings for Wood and Metals.—Lectures and laboratory. *I* or *II;* *(2 or 3).
Professor Parr

Prerequisite: Chemistry 5a and 14a-14b.

73. Asphalt, Tar, and Oil Residues.—Sources, characteristics, composition, and examination; binders and dust preventatives used in road construction. (For students in highway engineering.) *II;* (2). Professor Parr

Prerequisite: Chemistry 3 or 4.

76. Calorimetry of Fuels.—Methods of fuel inspection. (An advanced course.) *I* or *II;* *(1-3). Professor Parr, Dr. Broderson

77. Composition and Classification of Coal.—Classification, changes in composition, weathering, spontaneous combustion, formation of mine gases. Lectures; assigned reading. *II;* (1). Professor Parr

78. Metallography.—Constitution and microstructure of metals and alloys and the relations between their properties, chemical and mechanical treatment, and structures. Lectures; reading and laboratory. *II;* (2).
Assistant Professor McFarland

80. The Elements of Glass Blowing.—The construction and repair of glass apparatus; laboratory. *II;* (1). Mr. Anders

92a-92b, 93a-93b. Journal Meeting.—(For juniors, seniors, and graduates.) *I, II;* (1). All members of the teaching staff in the chemical department.

Courses for Graduates

Graduate students whose major subject is in some department other than chemistry, before taking graduate work for credit in this department, must have had the equivalent of 15 university credits in chemistry, and the work covered must have included satisfactory work in general chemistry and in qualitative and quantitative analysis. Such students are advised to take Chemistry 31, 33 (or 102, 102a), 5b, 5c, 14, 9a and 9b. Courses of a more special nature will not, as a rule, be accepted for graduate work unless preceded by one of the above courses.

For students in agriculture, Chemistry 5a and 13a will not be accepted for graduate credit.

Graduate students who are candidates for an advanced degree in chemistry must have the equivalent of 30 university credits in chemistry, including satisfactory courses in general chemistry, qualitative and quantitative analysis, physical and organic chemistry. They should have had courses in mathematics, including analytical geometry, and, if possible, the calculus. Before receiving the degree of Doctor of Philosophy such students are expected to complete work equivalent to courses 31, 33 (or 102 and 102a), 14, 9a, 9b, 101, and 111. They are advised to take at least brief courses in gas analysis, iron and steel analysis, water analysis, assaying, and chemical technology.

For students in chemistry, 5a, 13a, 9, and 9c will not be accepted for graduate credit and 9a, 9b, 14, 31 and 33 will be accepted only from students entering the Graduate School with the equivalent of 30 university credits in chemistry.

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*In registering for a course with variable credit hours, a student must put down on his study-list, *not* the possible hours, as shown here, but the number of hours for which *he* intends to take the course; e. g., not *2-5*, but *2*, or *3*, or *4*, or *5*.

101. History of Chemistry.—Lectures, Pattison Muir's *History of Chemical Theories and Laws*, and assigned reading. *Twice a week; I; (½ unit).*
Assistant Professor SMITH

102. Advanced Physical Chemistry.—This course with 102a, covers a period of two years. The subject is treated from the standpoint of Avogadro's Principle and Thermodynamics. The primary purpose is to develop power to handle successfully a physico-chemical problem rather than merely to impart a knowledge of the phenomena and the principles involved. Lectures and Seminar. Nernst's *Theoretische Chemie, 7th edition. Twice a week; I, II; (¾ unit).*
Professor WASHBURN

Prerequisite: Chemistry 1, 2; Physics 1, 3; Mathematics 8a or 7 and 9. An elementary knowledge of organic and physical chemistry is desirable.

[**102a. Advanced Physical Chemistry.**—Chemical equilibrium; the Phase Rule; thermochemistry; photochemistry. (A continuation of 102, with which it alternates.) Nernst's *Theoretische Chemie. Twice a week; I, II; (¾ unit).* Not given 1915-16.
Professor WASHBURN

Prerequisite: The same as course 102.]

102b. Advanced Electrochemistry.—The modern theories of solution and the principles of thermodynamics in their application to the problems of electrochemistry; electrolytic conductivity and transference; electro-motive force and the energy principles underlying the transformation of chemical and electrical energy. LeBlanc's *Electrochemistry. Three times a week; II; (1 unit).*
Dr. MACINNES

Prerequisite: Chemistry 102; Mathematics 8a or 7 and 9.

102c. Advanced Physical and Electrochemistry.—The applications of physico-chemical methods to special problems. Laboratory. *Twice a week; I; (½ to 1 unit).*
Professor WASHBURN

Prerequisite: Chemistry 31, 33; registration in Chemistry 102b, or completion of Chemistry 102, 102a, or 102b; Mathematics 8a or 7 and 9.

102d. Electrochemistry.—Theoretical and applied electrochemistry, with emphasis on the technical side of the subject. (For students in electrical engineering.) *Once a week; I; (½ unit).*
Dr. MACINNES

102e. Special Topics in Physical Chemistry.—Subject for 1914-15. Photochemistry. *Once a week; I; (½ unit).*
Professor WASHBURN

Prerequisite: Chemistry 102 or 102a.

103. Advanced Inorganic Chemistry.—The rarer elements; the periodic system. Lectures, with or without laboratory. *Two to five times a week; I, II; (½ to 1¼ units).*
Professor BALKE

103a. Advanced Analytical Chemistry.—Special topics. Lectures, with or without laboratory. *One to five times a week; II; (½ to 1¼ units).*
Assistant Professor SMITH

Prerequisite: Chemistry 5b, 9a, 9b, 14, 31, 33.

103b. Special Topics in Inorganic Chemistry.—Subject for 1915-1916: The Chemistry of the Higher Order Compounds. Werner, *Neuere Anschauungen auf dem Gebiete der Anorganischen Chemie;* assigned reading from later publications. Lectures and seminar. *Twice a week; I; (¾ unit).*
Assistant Professor SMITH

Prerequisite: Chemistry 9a, 9b, 14.

103c. Special Topics in Inorganic Cheimstry.—Seminar. Subject for 1914-15: The Determination of Atomic Weights. *Twice a week; II;* (*¾ unit*).
Professor BALKE

103d. Advanced Qualitative Analysis.—Methods of separation; qualitative reagents; reactions of some of the less common elements. Designed especially for those intending to teach qualitative chemistry. Lectures, with or without laboratory. *One to three times a week; I;* (*½ to 1 unit*).
Assistant Professor WEBER

104. Advanced Organic Chemistry.—This course alternates with 104a; each covering a period of one year. A systematic treatment of organic chemistry is given from the standpoint of the atomic linking theory, stereochemistry, chemical kinetics, mass action, and the Phase Rule. Typical laboratory experiments illustrating these principles are given from the investigational standpoint. Lectures; discussions; laboratory. Cohen's *Organic Chemistry for Advanced Students,* Volumes I and II. *Three times a week; I, II;* (*¾ unit*).
Assistant Professor DERICK

Prerequisite: Chemistry 14a, 9a, 31, 33 (102-102c). An elementary knowledge of crystallography is desirable.

[104a. Advanced Organic Chemistry.—(Continuation of 104, with which it alternates). Lectures; discussions; laboratory. *Three times a week; I, II;* (*¾ unit*).
Assistant Professor DERICK

Prerequisite: Chemistry 104. Given 1915-16.]

104b. Advanced Quantitative Organic Analysis.—The quantitative chemistry of the proteins, alkaloids, glucosides, volatile oils, and other constituents of animal and vegetable tissues. Plant analysis. Toxicological analysis. Concludes with a study of the general methods, chemical and physical, of organic analysis. Lectures and seminar. May be accompanied by laboratory work on a selected group of compounds. *Twice a week; I, II;* (*¾ unit*). Dr. BEAL

104c. Special Topics in Organic Chemistry.—Seminar. Subject 1914-15: *Theorien der Organischen Chemie,* Henrich, 1912 edition. *Once a week; II;* (*¼ unit*). Assistant Professor DERICK

105. Chemistry of Plants.—Carbohydrates, glucosides, fats, lipines, proteins, inorganic salts, alkaloids, tannins, pigments, enzymes, oxygen and carbon dioxide. Emphasis will be placed on plant processes and their physiological significance. Conferences and discussions. *II;* (*1¼ unit*). Mr. MACARTHUR

Prerequisite: Chemistry 9 or 14.

105a. Advanced Physiological Chemistry.—Special investigations. Laboratory. *One to five times a week; II;* (*¾ unit*). Mr. MACARTHUR

105b. Advanced Physiological Chemistry.—The biological importance of diffusion, solutions, chemical equilibrium, adsorption, colloids, osmosis, permeability, and enzymes. Recent contributions are emphasized. *Twice a week; I* or *II; (¾ unit).* Mr. MACARTHUR

106. Animal Chemistry (Animal Nutrition).—The recent advances in the chemistry of nutrition of the lower animals; the chemistry of the functional products; the flesh, fat, milk, and wool of the more common domesticated animals. Lectures; conferences; assigned reading; laboratory. *Five times a week; I, II;* (*1 to 1½ units*). Professor GRINDLEY

Prerequisite: Two years' work in chemistry.

107. Calorimetry.—Standards and methods. *One to three times a week; I, II;* (*½ to 1 unit*). Professor PARR

107a. Composition and Classification of Coal.—Once a week. *II;* (*½ unit*). Professor PARR

108. Advanced Metallography.—Constitution and microstructure of metals and alloys; the relations between their properties, chemical and mechanical treatment, and structure. Assigned reading and laboratory. *Twice a week; II;* (*¾ unit*). Assistant Professor MCFARLAND

Prerequisite: Chemistry 7 and 78, or equivalent.

109. Advanced Industrial Chemistry.—Seminar. Some of the more important chemical industries; the development and chemical control of processes. *Twice a week; I, II;* (*¾ unit*). Assistant Professor MCFARLAND

Prerequisite: Chemistry 6, 9, 14, 21 or equivalent.

110. Water Supplies.—Sources of contamination and purification of water for potable or technical use. *One to five times a week; I, II;* (*½ to 1¼ units*). Professor BARTOW

111. Research.—A thesis will usually be required of students taking the Master's degree and will always be required of students taking the degree of Doctor of Philosophy. (For a description of undergraduate work leading to a thesis, see Chemistry 11.) Work may be taken in the following subjects:

Physical and Electrochemistry.....Professor WASHBURN, Dr. MACINNES

Inorganic Chemistry...Professor BALKE, Assistant Professors SMITH, WEBER

Analytical Chemistry .....Assistant Professor SMITH

Food Chemistry .....Dr. BEAL

Organic Chemistry.....Professor NOYES, Assistant Professor DERICK

Water Chemistry .....Professor BARTOW

Animal Chemistry (Animal Nutrition).....Professor GRINDLEY

Physiological Chemistry .....Mr. MACARTHUR

Industrial Chemistry.....Professor PARR, Assistant Professor MCFARLAND

SUMMER SESSION COURSES

NOTE: With the exception of course S 32, all of the courses in chemistry offered in the Summer Session are equivalent to the courses of the same numbers given during the academic year.

Graduate Work.—The courses which are starred (*) below are accepted for graduate credit in accordance with the introductory paragraphs of the Graduate School Circular under the head of Chemistry.

S 1. Elementary Chemistry.—Inorganic chemistry; the non-metallic elements; illustrated lectures, recitations; laboratory work. Noyes' *Text Book of Chemistry.* Professor BALKE, Dr. HOPKINS, Mr. SEARS

S 1a and S 1b. Inorganic Chemistry.—(For students who have had one year of high school chemistry, or inorganic chemistry for engineering students.) These courses may be taken at the same hours as Chemistry S 1, but only half the laboratory time indicated for S 1 is required.

Professor BALKE, Dr. HOPKINS, Mr. SEARS

S 2. Descriptive Inorganic Chemistry.—(Continuation of S 1.) The metallic elements, their compounds and properties; illustrated lectures and recitations; no laboratory work. Noyes's *Text Book of Chemistry.* (2).

Professor Balke

Prerequisite: Chemistry 1.

S 3. Qualitative Analysis.—Lectures; recitations; laboratory; Noyes and Smith's *Qualitative Analysis.* (3). Assistant Professor Weber

Prerequisite: Chemistry 1.

***S 5a. Elementary Quantitative Analysis.**—Experiments illustrating the fundamental principles of gravimetric and volumetric methods; stoichiometrical relations, the fundamental laws of chemistry and their applications to quantitative analysis. Talbot's *Quantitative Chemical Analysis.* (5). Dr. Beal

Prerequisite: Chemistry 1 and 3.

***S 5c. Food Analysis.**—Quantitative organic analysis; food and drug products: alcohols, carbohydrates, fats and oils, animal and vegetable foods. nitrogenous bodies, preservatives and colors. Sherman's *Organic Analysis. "Bulletin 107, rev., U. S. Bureau of Chemistry."* (5). Dr. Beal

***S 9a. Organic Synthesis.**—Preparation of the typical compounds discussed in S 14. Noyes's *Organic Chemistry for the Laboratory.*

Assistant Professor Derick, Mr. Kamm

Prerequisite: Registration in S 14 (First Semester).

***S 9b. Organic Synthesis.**— Continuation of S 9a. Noyes's *Organic Chemistry for the Laboratory.* (2). Assistant Professor Derick, Mr. Kamm

Prerequisite: S 9a and registration in S 14 (Second Semester).

***S 14. Organic Chemistry.**—(First Semester.) The more typical and simple organic compounds; important derivatives of carbon. (May be substituted for Chemistry 9 of the academic year.) (3).

Assistant Professor Derick, Mr. Kamm

Prerequisite: Chemistry 2 and 3.

***S 14. Organic Chemistry.**—(Second Semester.) Lectures and recitatations. Noyes's *Organic Chemistry.* (3). Assistant Professor Derick

Prerequisite: Chemistry S 14 (First Semester) or equivalent

S 11 and *S 111. Research.—Advanced work and research in inorganic, physical, organic or analytical chemistry.

Professor Balke, Assistant Professors Derick and Weber, Dr. MacInnes, Dr. Beal

***S 13a. Agricultural Analysis.**—Gravimetric and volumetric analysis; fertilizers and milk. Talbot's *Quantitative Chemical Analysis.* (For students in Agriculture.) (5). Dr. Beal

S 17. Teachers' Course.—Methods in teaching *elementary chemistry;* a review of fundamental principles. (1). Professor Balke

Prerequisite: One year's work in chemistry.

***S 31. Elementary Physical Chemistry.**—Physical chemistry and electro-chemistry. Problems; lectures; recitations. (3). Dr. MacInnes

Prerequisite: Chemistry 1, 2, 3; Physics 1 or 2a; Mathematics 8a.

***S 32. Elementary Physical Chemistry.**—S 31 modified for those who have not had calculus.

Prerequisite: Chemistry 1, 2, 3; Physics 1a or 2a.

***S 33. Elementary Physical Chemistry.**—Molecular weight of gases and solutions; chemical equilibrium; the electrical conductivity of solutions and the attendant phenomena within the solution; thermochemistry. (Laboratory to accompany course 31.) (2). Dr. MacInnes

Prerequisite: Chemistry 5a; Physics 26 or 3.

CIVIL ENGINEERING

Ira Osborn Baker, C.E., D.Eng., *Professor*
Allen Boyer McDaniel, B.S., *Assistant Professor*
James Elmo Smith, C.E., *Assistant Professor*
Wilbur M Wilson, M.M.E., C.E., *Assistant Professor*
Charles Alton Ellis, A.B., *Assistant Professor*
Carroll Carson Wiley, C.E., *Associate*
Neal Bryant Garver, C.E., *Associate*
George Wellington Pickels, Jr., C.E., *Instructor*
William Horace Rayner, C.E., *Instructor*
Raymond Earl Davis, C.E., *Instructor*
*Guy G Mills, B.S., *Instructor*
Benjamin Lester Bowling, *Assistant in Cement Laboratory*

Courses for Undergraduates

5r. Masonry Construction.—Baker's *Masonry Construction. I;* (4). Professor Baker, Assistant Professor McDaniel

Prerequisite: Theoretical and Applied Mechanics 7, 8, 9, 10; Civil Engineering 20.

5l. Cement Laboratory Practise.—Standard tests for hydraulic cement. *I;* (1). Assistant Professor McDaniel, Mr. Bowling

Prerequisite: Theoretical and Applied Mechanics 7, 8, 9, 10; Civil Engineering 20; registration in Civil Engineering 5r.

6a. Theory of Reinforced Concrete.—Beams, columns, and slabs. Turneaure and Maurer's *Principles of Reinforced Concrete. I;* (1). Not given after 1914-15. Assistant Professor McDaniel, Assistant Professor Ellis

Prerequisite: Civil Engineering 5r, 5*l*.

6b. Masonry and Reinforced Concrete Design.—Beams, columns, slabs, arches, dams, retaining walls. *II;* (2). Not given after 1914-15. Assistant Professor Smith

Prerequisite: Civil Engineering 5r, 5*l*, 6a.

6c. Reinforced Concrete Buildings.—(For architectural engineers.) Theory of design of beams, columns and slabs; design of buildings, methods of construction; estimates of cost. Hool's *Reinforced Concrete Construction,* Vols. I and II. *II;* (5). Assistant Professor McDaniel

Prerequisite: Full senior standing in architectural engineering.

12. Bridge Analysis.—Determination of stresses of bridge trusses by algebraic and graphic methods, under different conditions of loading. Marburg's *Framed Structures and Girders,* Vol. I. *I;* (2). Not given after 1914-15. Assistant Professor Wilson, Assistant Professor Ellis, Mr. Garver

Prerequisite: Theoretical and Applied Mechanics 7, 8, 9, 10; and Civil Engineering 20, or Architecture 5 or 45.

*Second semester.

13. Structural Details.—Roof trusses, bridges, and steel-frame buildings; detail drawings and shop bills. Carnegie's *Pocket Companion. I;* (3). Not given after 1914-15. Assistant Professor WILSON, Mr. GARVER

Prerequisite: Theoretical and Applied Mechanics 7, 8, 9, 10; and Civil Engineering 20.

13a. Structural Details.—(For Architectural Engineers.) Roof trusses and steel-frame buildings; detail drawings and shop bills. Carnegie's *Pocket Companion. I;* (2). Not given after 1914-15. Assistant Professor WILSON

Prerequisite: Theoretical and Applied Mechanics 7, 8, 9, 10; and Architecture 5 or 45.

14. Steel Bridge Design.—Determination of stresses and sections of a plate girder and a truss span; stress sheet, general design drawings, detail drawings, and shop bills. Marburg's *Framed Structures and Girders,* Vol. I. *II;* (5). Not given after 1914-15. Assistant Professor WILSON, Mr. GARVER

Prerequisite: Civil Engineering 12, 13, 24.

14a. Steel Bridge Design.—(For Railway Civil Engineers.) Determination of stresses and sections of a plate girder and a truss span. Part of Steel Bridge Design (C.E. 14). Marburg's *Framed Structures and Girders,* Vol. I. *II;* (2). Not given after 1914-15. Mr. GARVER

Prerequisite: Civil Engineering 12, 24.

14b. Steel Building Design.—(For Architectural Engineers.) Determination of the sections of the members of a steel-skeleton office building; wind stresses; column loads; column schedule; floor plan and typical details; spandrel beams, footings, and grillages. *II;* (2). Not given after 1914-15.

Assistant Professor WILSON

Prerequisite: Civil Engineering 12, 13a, 24.

15. Advanced Bridge Analysis.—Continuous, draw, cantilever, suspension, and steel-arch bridges, Johnson, Bryan, and Turneaure's *Modern Framed Structures,* Part II. *II;* (2). Not given after 1914-15.

Assistant Professor ELLIS

Prerequisite: Civil Engineering 12, 13, 24, and registration in Civil Engineering 14.

16. Engineering Contracts and Specifications.—The law of contract; general and technical clauses used in engineering specifications. Johnson's *Engineering Contracts and Specifications. II;* (2). Assistant Professor MCDANIEL

Prerequisite: Civil Engineering 5, 12, 13; Municipal and Sanitary Engineering 2, 3.

24. Steel Building Design.—Determination of stresses and design of members in steel-frame buildings. Marburg's *Framed Structures and Girders,* Vol. I. *I;* (1). Not given after 1914-15.

Assistant Professor WILSON, Assistant Professor ELLIS, Mr. GARVER

Prerequisite: Theoretical and Applied Mechanics 7, 8, 9, 10; Civil Engineering 12, 13.

25. Seminar.—One major and two minor papers upon assigned topics; discussion. *II;* (1). Not given after 1914-15. Professor BAKER

Prerequisite: Full senior standing in Civil Engineering.

27. Plane Surveying.—Theory, use, and adjustment of the compass, transit, and level; computation of areas and partitioning of land; U. S. land

survey methods, re-establishment of corners and boundaries, and interpretation of deeds; farm and city surveying. Problems with the tape, compass, transit, and level. Breed and Hosmer's *Principles and Practice of Surveying,* Vol. I. *I;* (3). Assistant Professor Smith, Mr. Wiley, Mr. Pickels, Mr. Davis

Prerequisite: General Engineering Drawing 1, 2; Mathematics 4.

28. Higher Surveying.—Theory and use of the transit and plane-table in making topographic surveys; methods; determination of latitude, longitude, and azimuth by stellar and solar observations; topographic drawing; a complete topographic survey based on a system of triangulation. Breed and Hosmer's *Principles and Practice of Surveying,* Vol. II. *II;* (3).

Mr. Pickels, Mr. Rayner, Mr. Davis

Prerequisite: Civil Engineering 27.

31. Surveying.—(For students in Landscape Architecture.) The theory, use, and adjustment of the compass, level, transit, and plane-table. Determination of distances by pacing and with chain and tape; determination of areas with compass and transit; profile leveling; elementary problems with plane-table. Breed and Hosmer's *Principles and Practice of Surveying,* Vol. I. *I;* (3).

Mr. Pickels

Prerequisite: Mathematics 4; Architecture 31, 32.

32. Topographic Surveying.—(For students in Landscape Architecture). Theory and use of the stadia; conventional topographical signs; contour construction and its use in grading and drainage problems; advanced work with the plane-table. Each student will prepare a large scale topographic map of a portion of the campus. Breed and Hosmer's *Principles and Practice of Surveying,* Vol. II. *II;* (3). Mr. Pickels

Prerequisite: Civil Egineering 31.

33. Surveying.—(For students in Geology.) The use and adjustment of the compass, level, transit, and plane-table. The determination of distances by pacing and with chain and tape; the determination of areas with the compass and transit; differential leveling; survey for a large scale map with plane-table. U. S. land survey methods; problems in strike and dip. Breed and Hosmer's *Principles and Practice of Surveying,* Vol. I. *I;* (3). Mr. Rayner

Prerequisite: Mathematics 4.

34. Topographic Surveying.—(For students in Geology.) Theory and use of stadia measurements; azimuth determinations from solar and stellar observations; lettering, conventional topographic signs; contour construction and its relation to geologic formations; survey for small scale map with plane-table, barometer and pacing methods. Breed and Hosmer's *Principles and Practice of Surveying,* Vol. II. *II;* (3). Mr. Rayner

Prerequisite: Civil Engineering 33.

51. Railroad Surveying.—Economic location, construction, and maintenance of railways; curves, turnouts, and earthwork; preliminary and location surveys of a line of sufficient length to secure familiarity with the methods in actual practise. Each student makes a complete set of maps, profiles, and estimates. Pickels and Wiley's *Railroad Surveying. I;* (5).

Assistant Professor Smith, Mr. Wiley, Mr. Rayner, Mr. Davis

Prerequisite: Civil Engineering 27, 28.

52. Roads and Pavements.—The construction, maintenance, and cost of earth, gravel, macadam, and bituminous roads; the methods of construction,

cost, durability, and desirability of the various kinds of pavements; maintenance and cleaning of street pavements; the adaptation of pavements to country roads; grades; cross sections; assessment of cost. Baker's *Roads and Pavements. II;* (3). Mr. WILEY

Prerequisite: C.E. 27, 28 or C.E. 31, 32, or C.E. 33, 34.

53. Railroad Surveying.—First eleven weeks of Civil Engineering 51, for municipal and sanitary engineering juniors. *I;* (3).

58. Graphic Statics.—(For Mining Engineers.) Determination of stresses in roof and bridge trusses and in three-hinged arches. Malcolm's *Elements of Graphic Statics. II;* (2). Mr. GARVER

Prerequisite: Theoretical and Applied Mechanics 20, 25.

60. Structural Stresses.—Elements of graphic statics; determination of stresses in roofs, bridges, and steel-frame buildings by algebraic and graphic methods; Marburg's *Framed Structures and Girders,* Vol. I. *II;* (4).
Assistant Professor ELLIS, Assistant Professor SMITH, Mr. GARVER

Prerequisite: Theoretical and Applied Mechanics 21, 29.

62. Structural Details.—Roof trusses, bridges, and steel-frame buildings; detail drawings and shop bills. Carnegie's *Pocket Companion. II;* (2).
Assistant Professor ELLIS, Assistant Professor SMITH, Mr. GARVER

Prerequisite: Theoretical and Applied Mechanics 21, 29; and registration in Civil Engineering 60.

70. Seminar.—One major and two minor papers upon assigned topics; discussion. *II;* (1). Assistant Professor MCDANIEL, Mr. RAYNER, Mr. DAVIS

Prerequisite: Full junior standing in Civil Engineering.

76. General Surveying.—U. S. public land surveys; principles of re-establishing corners. Use of transit in finding distances, areas, and in laying out buildings; use of the level in finding profiles and contours. (For students in mechanical engineering.) Pence and Ketchum's *Surveying Manual; II;* (2).
Mr. PICKELS, Mr. MILLS

Prerequisite: Mathematics 4; General Engineering Drawing 1, 2; Physics 1a-1b, 3a-3b.

77. Masonry Construction.—Baker's *Masonry Construction. I;* (4).
Professor BAKER, Assistant Professor MCDANIEL

Prerequisite: Theoretical and Applied Mechanics 20, 21, 29, 10; Civil Engineering, 60, 62.

79. Cement Laboratory Practise.—Standard tests for hydraulic cement. *I;* (1). Assistant Professor MCDANIEL, Mr. BOWLING

Prerequisite: Theoretical and Applied Mechanics 20, 21, 29, 10; Civil Engineering 60, 62; registration in Civil Engineering 77.

80. Contracts and Specifications.—The law of contract; general and technical clauses used in engineering specifications. Johnson's *Engineering Contracts and Specifications. II;* (2). Assistant Professor MCDANIEL

Prerequisite: Full senior standing in an engineering course.

81. Theory of Reinforced Concrete.—Beams, columns, slabs, etc. Turneaure and Maurer's *Principles of Reinforced Concrete. I;* (2).
Assistant Professor MCDANIEL, Assistant Professor ELLIS

Prerequisite: Civil Engineering 71, 79, 83, or 85.

[82. **Concrete Design.**—Plain and reinforced concrete arches, culverts, dams, bridges, and retaining walls. Turneaure and Maurer's *Principles of Reinforced Concrete Construction. II;* (4). Not given in 1914-15.

Assistant Professor SMITH

Prerequisite: Civil Engineering 81.]

[83. **Bridge Design.**—(For Railway Civil Engineers, and Civil Engineers taking the General Civil Engineering Option.) Determination of stresses and sections of a plate girder and a truss span; stress sheet, general design drawings, and estimates of weights. Marburg's *Framed Structures and Girders,* Vol. I. *I;* (3). Not given in 1914-15.

Prerequisite: Civil Engineering 60, 62.]

[84. **Concrete Buildings.**—Design of reinforced-concrete buildings. Hool's *Reinforced Concrete Construction.* Vol. II. *II;* (4). Not given in 1914-15. Assistant Professor MCDANIEL

Prerequisite: Civil Engineering 81.]

[85. **Steel-Bridge Design.**—(For Civil Engineers taking the Structural Engineering Option.) Same as 83 above, a fuller course. Marburg's *Framed Structures and Girders,* Vol. I. *I;* (5). Not given in 1914-15.

Prerequisite: Civil Engineering 60, 62.]

86. **Reinforced-Concrete Buildings.**—(For Architectural Engineers.) Principles, design, and their application to beams, columns and slabs and to various types of buildings. Hool's *Reinforced Concrete Construction,* Vols. I and II. *II;* (5). Assistant Professor MCDANIEL

Prerequisite: Full senior standing in architectural engineering.

[87. **Advanced Bridge Analysis.**—Continuous, draw, cantilever, suspension, and steel arch bridges. Johnson, Bryan, and Turneaure's *Modern Framed Structures,* Part II. *I;* (2). Not given in 1914-15.

Prerequisite: Civil Engineering 60, 62; and registration in Civil Engineering 83 or 85.]

[88. **Steel Building Design.**—Stresses and sections of the steel frame of mill and office buildings; footings and grillages; design drawings and estimate of weights. *II;* (3). Not given in 1914-15.

Prerequisite: Civil Engineering 60, 62.]

91. **Highway Bridge Design.**—Types of highway bridges; determination of location, size, and type. Steel bridges, beam, low-truss, and through-truss; methods and cost of construction. *I;* (4). Mr. GARVER

Prerequisite: Civil Engineering 60, 62.

[92. **Concrete Bridges and Culverts.**—Reinforced-concrete slab, girder, and arch bridges; falsework and forms; estimates of quantities; costs. *II;* (2). Not given in 1914-15.

Prerequisite: Civil Engineering 77, 79, 81, 91.]

[93. **Road Construction.**—Merits of different types of roads and pavements; principles of design; preparation of plans, specifications, and estimates of cost. *I;* (3). Not given in 1914-15.

Prerequisite: Civil Engineering 52, Theoretical and Applied Mechanics 21, 29.]

[**94. Highway Administration.**—Road construction and maintenance in Europe and America; taxation and methods of financing road work; the relation of highway improvement to social and economic welfare. *II;* (3). Not given in 1914-15. Mr. Wiley

Prerequisite: Senior standing in Civil Engineering course.]

[**95. Structural Stresses.**—(For Architectural Engineers.) Determination of stresses in steel-frame buildings and in steel bridges by algebraic and graphic methods. *I;* (3). Not given in 1914-15.

Prerequisite: Architecture 5 or 45.]

[**96. Road Laboratory.**—Examining and testing bituminous and non-bituminous road materials; interpretation of the results. *II;* (2). Not given in 1914-15.

Prerequisite: C.E. 52, 79; Chemistry 73.]

97. Structural Details.—(For Architectural Engineers.) Roof trusses and steel-frame buildings; detail drawings and shop bills. Carnegie's *Pocket Companion. I;* (2).

Prerequisite: Civil Engineering 58, or Architecture 45.

[**98. Office-Building Design.**—(For Architectural Engineers.) Determination of the sections of the members of a steel skeleton office building; wind stresses; column loads; column schedules; floor plans and typical details; spandrel beams, footings and grillages. *II;* (2). Not given in 1914-15.

Prerequisite: Civil Engineering 60, 62.]

99-100. Thesis.—A problem in investigation or design, subject to the approval of the head of the department. Only students of high standing are permitted to take a thesis. Students not taking a thesis substitute such regular class work as is approved by the head of the department. *I;* (1): *II;* (2).

Professor Baker

Prerequisite: Full senior standing in Civil Engineering.

Courses for Graduates

106. Reinforced Concrete Design.—Specifications for design in the light of modern tests. Concrete forms. Typical structures. Methods and costs of construction. *Twice a week; I, II. (1½ units or more).*

Assistant Professor McDaniel

107. Bridge Engineering.—Theory of deflections; the statically indeterminate frame, applications to swing bridges and arches; special graphical methods; theory of suspension bridges; secondary stresses; impact. *Two or three times a week; I, II. (1 unit or more.)* Assistant Professor Ellis

124. Steel Building Construction.—Steel framing of fireproof office buildings, hotels, and industrial buildings; wind bracing; long columns; eccentrically loaded columns; eccentric connections; analysis of special details; erection methods and costs. *Three times a week; I, II.*

Assistant Professor Wilson

THE CLASSICS

Herbert Jewett Barton, A.M., *Professor, Chairman*
Charles Melville Moss, Ph.D., *Professor*
William Abbott Oldfather, Ph.D., *Associate Professor*
Arthur Stanley Pease, Ph.D., *Associate Professor*
Howard Vernon Canter, Ph.D., *Assistant Professor*

Majors

A major in the Classics consists of 20 hours in Greek and Latin, of which at least 6 shall be in the secondary language and the remaining hours in the primary language. Only those courses may count toward the major in the Classics which count toward a major in Greek and Latin respectively.

A major in Greek consists of 20 hours, not incuding Greek 1, 17, 18, 19.

A major in Latin consists of 20 hours, not including Latin 12. Latin 1 may be counted for half credit only.

Honors

For honors in Greek, the major shall be the ordinary one of 20 hours, as defined above; the minors shall be Latin and one other foreign language, or history, or philosophy, or English literature. Neither minor shall consist of less than 8 hours, and the two together must aggregate not less than 20 hours. No course may be counted toward these minors which is not counted toward a major in the department concerned.

For honors in Latin, the major shall consist of 20 hours and shall include Latin 14 and 16; the minors shall be at least one other foreign language, preferably Greek, and one of the following: English literature, a modern language, history, or philosophy with the same conditions as in the case of Greek.

GREEK

Courses for Undergraduates

The courses in translation naturally follow one another in this sequence: 1, 3, 4, 5 (7), 6 (8). Courses 1, 3, and 4 are intended for students who cannot present Greek for entrance to the University, but who desire to commence the study of the language. Course 2 may be taken after course 1 and course 14 after courses 5 or 7. 16, 17, 18, and 19 are open to sophomores, juniors, and seniors; 20 is open to those who have completed one year in history or in classics.

1a-1b. Grammar and Reader.—a (first semester), Attic forms; reading of simple prose; b (second semester), Xenophon's *Anabasis,* Book I. *I, II;* (4).
Associate Professor Oldfather

2a-2b. New Testament Greek.—a (first semester), Reading of selections; b (second semester), Lectures on Canon and Text. *I, II;* (2).
Professor Moss

Prerequisite: Greek 1.

3. Second Year Greek.—Xenophon's *Anabasis,* Books II-IV; grammatical drill. *I;* (3). Assistant Professor Canter

Prerequisite: Greek 1.

4. Second Year Greek.—Homer, six Books of the *Iliad. II;* (3).
Assistant Professor Canter

Prerequisite: Greek 3.

5. Herodotus.—Selections, including portions of Books VI-VIII; Greek lyric poets. *II;* (3). Professor Moss

Prerequisite: Greek 4.

6. Thucydides.—The *Sicilian Expedition,* Books VI-VII. *I;* (3).
Associate Professor Pease

Prerequisite: Greek 4.

14. Greek Prose Composition.—*II;* (1). Professor Moss

Prerequisite: Greek 5 and 6 or 7 and 8.

Greek Life and Literature in English

(Courses 16-20 presuppose no knowledge of Greek and are open to all students except freshmen.)

16. The Private and Public Life of the Greeks.—Lectures illustrated by photographs and slides; prescribed readings; *I;* (1). Professor Moss

17. Greek Poetry in Translations.—*I;* (2). Professor Moss

18. Greek Prose in Translations.—*I;* (2). Professor Moss

19. Greek Drama in Translations.—*II*; (2). Professor Moss

20. Greek History.—(This course is described by the department of history as History 5.) *I;* (3). Associate Professor OLDFATHER

Prerequisite: One course in history or the classics. Not open to freshmen.

Courses for Graduates

104. Homer and the Homeric Question.—Lectures and reading in alternate hours. *I, II; (1 unit).* Associate Professor OLDFATHER

107. Greek Oratory.—One or more speeches of each of several orators; lectures and reports. *I, II; (1 unit).* Professor Moss

110. Bibliography and Criticism.—*Once a week. I, II; (¼ unit).* Associate Professor OLDFATHER, Associate Professor PEASE, and others

LATIN

1a-1b. Ovid and Virgil.—a (first semester), selections from the *Amores, Heroides,* and *Metamorphoses;* b (second semester), selections from the *Aeneid. I, II;* (4). Associate Professor PEASE, Assistant Professor CANTER

Prerequisite: Three entrance units in Latin.

2a-2b. Livy, Plautus, and Terence.—a (first semester); Livy, the story of Hannibal; b (second semester), the *Rudens* of Plautus and the *Phormio* of Terence. *I, II;* (4). Professor BARTON

Prerequisite: Four entrance units in Latin.

3. Sallust and Cicero.—Selections from the *Jugurthine War; De Senectute. I;* (3). Assistant Professor CANTER

Prerequisite: Latin 2.

4. Horace and Catullus.—Selections. *II;* (3). Associate Professor OLDFATHER

Prerequisite: Latin 2.

5a-5b. Latin Composition.—Grammatical drill and practise in the simpler forms of expression. *I, II;* (1). Assistant Professor CANTER

Prerequisite: Latin 1 or its equivalent.

Roman Life and Literature in English

(Courses 12 and 13 presuppose no knowledge of Latin; open to all students except freshmen.)

12. Virgil and Horace in English Translations.—The *Aeneid* and selections from Horace. *I;* (2). Professor BARTON

13. Roman Life.—The family, organizations of society, education, marriage, amusements, with some attention to the monuments. Lectures and assigned readings illustrated by photographs and slides. *II;* (1). Professor BARTON

19. Roman History.—(This course is described by the department of history as History 6.) Not open to freshmen. II; (3).
Assistant Professor CANTER

9. Teachers' Course.—The purpose and methods of preparatory Latin instruction; the teacher's preparation. *II;* (2). Professor BARTON
Prerequisite: 17 hours in Latin. A portion of this requirement may be waived in the case of those who have taught Latin.

10. Latin Composition.—The leading principles; imitation of assigned models. *I;* (2). Professor BARTON
Prerequisite: 12 hours in Latin, including Latin 5 or its equivalent.

Courses for Advanced Undergraduates and Graduates

7. Horace and Juvenal.—Selections from the *Satires* and *Epistles* of Horace; selected *Satires* of Juvenal. *I;* (3). Associate Professor PEASE
Prerequisite: 12 hours in Latin.

[**8. Tacitus.**—The *Annals.* Books I-VI. *I;* (3). Not given in 1914-15.
Associate Professor PEASE
Prerequisite: 12 hours in Latin.]

14. Seneca.—Selections from his letters and tragedies. *II;* (3).
Professor BARTON
Prerequisite: 15 hours in Latin.

[**16. Martial and Suetonius.**—Selections; lectures on literary history. *II;* (3). Not given in 1914-15. Associate Professor OLDFATHER
Prerequisite: 15 hours in Latin.]

22. Late Latin.—Rapid reading of selections from the Latin writers from Minucius Felix to Cassiodorus. *II;* (2). Associate Professor PEASE
Prerequisite: Open to seniors and graduates who have had two years of college Latin or who otherwise satisfy the instructor of their ability to do the work required.

Courses for Graduates

Students desiring to take graduate work in Latin should have had at least three years of college Latin in addition to the Latin presented to meet entrance requirements.

103. Cicero.—*De Natura Deorum* and *De Divinatione; twice a week. I; (1 unit).* Associate Professor PEASE

104. Latin Paleography.—*Twice a week. I; (1 unit).*
Associate Professor PEASE

[**106. Terence.**—*Twice a week. I; (1 unit).* Not given in 1914-15.]
Associate Professor OLDFATHER

107. Latin Epigraphy.—*Twice a week. II; (1 unit).*
Associate Professor PEASE

108. Tacitus.—The *Histories. Twice a week. I; (1 unit).*
Professor BARTON

109. Virgil.—*Twice a week. II; (1 unit).* Associate Professor PEASE

110. Bibliography and Criticism.—*Once a week. I, II; (¼ unit).*
Associate Professor OLDFATHER, Associate Professor PEASE, and others

112. Roman Historiography.—*Twice a week. II; (1 unit).* Assistant Professor CANTER

113. Plautus.—*Twice a week. I; (1 unit).* Associate Professor OLDFATHER

114. Caesar.—*Twice a week. II; (1 unit).* Associate Professor OLDFATHER

SUMMER SESSION COURSES

S 1. Plautus.—Three plays with brief discussion of the language and verse of comedy. (For those who have had three or four years of high school Latin.) (2). Assistant Professor CANTER

S 2. The Roman Historians.—Selections from Sallust, Livy, Tacitus, and Suetonius, illustrating the aims and methods of each in the field of historical writing. (For those who have had two or three years of college Latin or the equivalent.) (1½). Assistant Professor CANTER

S 3. The Private Life of the Romans.—The house, marriage, dress, education, and amusements. Illustrated lectures and assigned readings. (½). Professor BARTON

S 4. Teachers' Course.—Problems and methods of instruction in Latin in the secondary schools; the essentials of Latin study in the first and second years; books and equipment. The slides and photographs of the Classical Department and the Classical Museum will be at the disposal of the class. (1½). Professor BARTON

Course for Graduates and Advanced Undergraduates

***S 5. Roman Satire.**—Lectures and discussions on the origin and history of satire as a department of literature; readings from Horace, Juvenal, Persius, and Petronius. (1½). Assistant Professor CANTER

COMMERCIAL LAW

(See ECONOMICS and ACCOUNTANCY)

COMPARATIVE PHILOLOGY

LEONARD BLOOMFIELD, Ph.D., *Assistant Professor*

For Graduates and Advanced Undergraduates

1. Introduction to the Study of Language.—Phonetics; the development of forms of speech; dialects and the spread of languages; the study and teaching of language. *I;* (3). Assistant Professor BLOOMFIELD

Prerequisite: The consent of the instructor.

2. Comparative Philology of the Indo-European Languages.—Greek, Latin, and the Germanic languages, including English. *II;* (2). Assistant Professor BLOOMFIELD

Prerequisite: The consent of the instructor.

3. Elementary Sanskrit.—Reading and grammar. *I;* (3). Assistant Professor BLOOMFIELD

Prerequisite: The consent of the instructor.

4. Elementary Sanskrit.—Continuation of 3. *II;* (3). Assistant Professor BLOOMFIELD

Prerequisite: Comparative Philology 3.

DAIRY HUSBANDRY

HARRY ALEXIS HARDING, Ph.D., *Professor, Dairy Bacteriology*
WILBUR JOHN FRASER, M.S., *Professor, Dairy Husbandry*
MARTIN JOHN PRUCHA, Ph.D., *Assistant Professor, Dairy Bacteriology*
NELSON WILLIAM HEPBURN, M.S., *Assistant Professor, Dairy Manufactures*
LEROY LANG, M.S., *Associate, Dairy Manufactures*
ROYDEN EARL BRAND, M.S., *Associate, Dairy Husbandry*
FRANK ASHMORE PEARSON, B.S.A., *Instructor, Dairy Husbandry*
WILLIAM TRUMAN CRANDALL, M.S., *Associate, Milk Production*
HARRISON AUGUST RUEHE, B.S., *Instructor, Dairy Manufactures*
RAY STILLMAN HULCE, M.S., *Instructor, Milk Production*
OLIVER ARNOLD KELLER, B.S., *Assistant, Dairy Manufactures*
WILLIAM WODIN YAPP, M.S., *Assistant, Dairy Husbandry*
HARRY MONTGOMERY WEETER, A.B., *Assistant, Dairy Husbandry*
WILLIAM BARBOUR NEVENS, B.S., *Assistant, Dairy Husbandry*
PAUL WILLIAM ALLEN, M.S., *Assistant, Dairy Bacteriology*

Courses for Undergraduates

1. **Milk Testing.**—Official testing; inspectors' methods; tests for purity and adulteration; lactometer; acid tests; tests for preservatives; butter analysis; moisture, salt and fat tests; lectures; assigned readings; laboratory practise. (Alternates with Dairy Husbandry 16 if desired.) *I;* (3).

Assistant Professor HEPBURN, Mr. KELLER

2. **Dairy Cattle.**—Dairy type and its relation to milk and butter fat production; origin and history of breeds; characteristics, type and adaptability; markets and climatic conditions; prominent families and individuals in principal breeds; herd improvement; selection of animals on performance, breeding and physical conformation; grading up by use of superior sires. Lectures; recitations; judging. Lectures; laboratory. *II;* (4). Mr. CRANDALL

3. **Elements of Dairy Husbandry.**—The herd; sanitation; milk testing; milk products. Lectures; demonstrations. (Required of all freshmen in the general course in Agriculture.) *I* or *II;* (1).

Mr. HULCE and members of the Department

4. **Ice Cream Making.**—Principles; types of freezers; methods of freezing. Mixing and freezing ice cream, sherbets, puddings, and other frozen products. Study of flavoring extracts, fillers and binders. Ice cream standards. *II;* (2). Mr. RUEHE

Prerequisite: Dairy Husbandry 1.

7. **Creamery Buttermaking and Factory Management.**—Types of creameries; raw product received; grading; pasteurization; use of commercial starters; ripening; churning; salting; working butter. Butter composition; uniformity and methods of control; butter scoring. Creamery accounting and business methods; co-operative and centralized management; sale of creamery by-products; refrigerating; location and creamery plans; disposal of sewage. Lectures; assigned readings; laboratory practise. *II;* (5).

Assistant Professor HEPBURN, Mr. LANG

Prerequisite: Dairy Husbandry 1.

8. City Milk Supply.—Production, transportation, and delivery of city milk. Especial emphasis upon the sanitary aspects. *II;* (2).

Professor HARDING

Prerequisite: Dairy Husbandry 1.

11. Dairy Bacteriology.—Bacteria of milk and its products from the udder to the consumer; methods of introduction; effect upon the milk; and methods for control. Lectures; *I;* (1); laboratory; *I;* (4). Professor HARDING

Prerequisite: Bacteriology 5.

16. Feeding Dairy Cattle.—Compounding rations for dairy cows; preparation of feeds; study of station feeding tests; effect of feeds on milk products; calf raising, feeding and general care; barn arrangement, with reference to storage and feeding; types of mangers and silos. A study of the feeding of the University dairy herds and the types of silos in use. (Alternates with Dairy Husbandry 1 if desired). *I;* (3). Mr. HULCE

Prerequisite: Animal Husbandry 6.

17. Advanced Study of Dairy Breeds.—Origin and history of dairy breeds; prominent families and noted individuals, their characteristics and producing abilities; pedigree work with emphasis upon performance records; advanced registry systems; problems of the breeder of pure bred dairy cattle. The student may specialize in the particular breed in which he is interested. Lectures; assigned readings; seminar work. *I;* (2). Mr. CRANDALL

Prerequisite: Dairy Husbandry 2 and 16.

19. Farm Dairying.—Farm butter making; systems of creaming milk; cooling and storing cream; ripening, churning, working, and marketing butter; the hand separator; plans of dairy houses for various products. Lectures; laboratory. *I;* (2). Assistant Professor HEPBURN, Mr. KELLER

Prerequisite: Dairy Husbandry 1.

21. Systems of Dairy Farming.—Relation of the cow and the herd to profits; how to establish and perpetuate a dairy herd of the highest efficiency; economy of crops and rations; systems of cropping; organization; location and arrangement of buildings and lots; farm accounts, records and inventories; markets; care and disposal of milk at the greatest profit. *II;* (5).

Professor FRASER

Prerequisite: Dairy Husbandry 2 and 16.

22. Cheese Making.—Ripening and settling milk; cutting, cooking, and dipping curd; cheddering, milling, matting, and salting curds; pressing and curing cheese; cottage, Neufchatel and other varieties; practise in making more common varieties. Alternates with Dairy Husbandry 19 if desired. *I;* (3).

Mr. LANG, Mr. KELLER

Prerequisite: Dairy Husbandry 1.

Courses for Graduates

101. Economic Milk Production.—Differences in the efficiency of dairy cows, cause and effect of the same, and the relation this bears to successful dairy farming. *Twice a week. I, II; (1 unit).* Professor FRASER

102. Research.—Progress in the dairy herds of the state. *I, II; (1 unit).*

Professor FRASER

103. Research.—Dairy Feeding Problems. *I, II; (1 unit).*
Professor Fraser

104. Dairy Bacteriology.—*I, II; (2 units).* Professor Harding

DENTISTRY

(See under College of Dentistry)

DRAWING, GENERAL ENGINEERING

Harry Willard Miller, M.E., *Assistant Professor*
Robert Kent Steward, C.E., *Associate*
Francis Marion Porter, M.S., *Associate*
*Harold Ordway Rugg, C.E., *Instructor*
Harvey Herbert Jordan, B.S., *Instructor*
Rufus Crane, A.B., B.S., *Instructor*
Clarence Allen Atwell, B.S., *Assistant*
Robert Maurice Husband, *Half-time Assistant*

1. Elements of Drafting.—Lettering; isometric oblique and perspective drawing, orthographic projection; machine sketching; working drawings. Lettering; mechanical styles and the making of name plates and titles. Mechanical drawing: 12 plates from copy and 6 plates from models, with tracings of each. Dimensioned sketches from parts of standard machines; complete working drawings. Tracings duplicated in blue-print form. Time sketches of equipment. Miller's *Mechanical Drafting. I* or *II;* (4).
Assistant Professor Miller and department staff

2. Descriptive Geometry.—The point, line, and plane; the properties of surfaces; intersections and developments. (For achitects, perspective instead of intersections and developments.) Practical problems; recitations. Three drawing room plates, 2 hours each, 5 problems per plate, and 2 home plates, 5 problems each per week. Miller's *Descriptive Geometry, I* or *II;* (4).
Assistant Professor Miller and department staff

Prerequisite: Solid geometry, college algebra, plane trigonometry.

12. Descriptive Geometry.—Similar to G. E. D. 2, but more condensed. (For students in ceramics and business.) *II;* (3).

21. Advanced Descriptive Geometry.—Review of course 2; the cylinder, cone, convolute and warped surface; intersections of these surfaces in pairs, and by planes; planes tangent; developable and approximately developable surfaces and doubly curved and complex surfaces of revolution; practical applications and methods. *II;* (2). Mr. Porter

Prerequisite: G. E. D. 1, 2.

SUMMER SESSION COURSES

S 1. Elements of Drafting.—Freehand and mechanical lettering; practise in the use of instruments on standard set of drawing plates; tracing, machine sketching, isometric and oblique projection, and perspective. (Required of all engineering students.) Miller's *Mechanical Drafting.* (4). Mr. Jordan

S 2. Descriptive Geometry.—Point, line, and plane; the properties of surfaces; intersections and developments of surfaces. Miller's *Descriptive Geometry.* (4.) Mr. Jordan

*Resigned, February 1, 1915.

ECONOMICS

(Including Accountancy.)

David Kinley, Ph.D., LL.D., *Professor*
*Maurice Henry Robinson, Ph.D., *Professor*
Ernest Ritson Dewsnup, A.M., *Professor*
Ernest Ludlow Bogart, Ph.D., *Professor*
George Enfield Frazer, A.B., LL.B., *Professor*
William Arthur Chase, LL.B., C.P.A., *Lecturer, in charge of work in Accountancy*
Nathan Austin Weston, Ph.D., *Assistant Professor*
Simon Litman, Dr. Jur. Pub. et Rer. Cam., *Assistant Professor*
Ralph Emerson Heilman, Ph.D., *Assistant Professor*
Charles Manfred Thompson, Ph.D., *Associate*
John Giffen Thompson, Ph.D., *Instructor*
Hiram Thompson Scovill, A.B., *Instructor*
Harrison McJohnston, A.M., *Instructor*
Roger Frank Little, A.B., LL.B., *Lecturer, Business Law*
Elmore Petersen, A.B., *Assistant*
William Henry Dreesen, A.B., *Assistant*
Edward Lawrence McKenna, A.B., *Assistant*
Charles Kelly Knight, A.M., *Assistant*
Charles Leslie Stewart, A.M., *Fellow*
John Emmett Kirshman, Ph.M., *Fellow*

SUMMER SESSION ONLY

Frank Tracey Carlton, Ph.D., *Albion College*

The department of economics includes general economics, economic history, finance, commerce, commercial law, industry, railway administration and accountancy. The courses in commercial law and accountancy may not be counted towards a major in economics.

Courses 7 (English Economic History), 22 (Economic History of the United States), and 26 (Economic Resources), are open to freshmen without previous requirement. Course 27 is also open to freshmen, but requires credit in course 26 or an approved high school course in commercial geography.

Courses 4a-4b, 5, 8, 10, 11, 12, 13, 17, 19, 20, 21, 29, 30, 41, 42, 43a-43b, 45a-45b and 51 are open to graduates and advanced undergraduates.

Courses numbered 101 and above are open to graduate students only.

The courses in accountancy and commercial law, which are given in the Department, may not be counted towards a major in economics.

A. ECONOMICS

Courses for Undergraduates

1. Principles of Economics.—*I;* (5).
Professor Dewsnup, Assistant Professor Weston, Dr. J. G. Thompson and Assistants

Prerequisite: At least thirty hours of university work.

*On leave 1914-1915.

2. Principles of Economics.—Section A open to junior and senior engineering students only; section C to junior and senior agricultural students only. *I* or *II;* (2).

Professor Bogart, Assistant Professor Litman, Assistant Professor Heilman and Assistants

Prerequisite: Junior or senior standing in the Colleges of Engineering or Agriculture.

3. Money and Banking.— Money, credit, and banking. *II;* (3).

Assistant Professor Weston, Dr. C. M. Thompson, and assistants

Prerequisite: Economics 1.

[**4a-4b. Financial History of the United States.**—First semester; colonial and federal finance, including currency, banking, tariff and fiscal questions, to the period of the Civil War. Second semester; finances of the Civil War and Reconstruction periods, and the recent development of public and private finance. (Either semester's work may be taken separately.) *I, II;* (2). Not given in 1914-15. Assistant Professor Weston

Prerequisite: Economics 3 and senior standing.]

5. Public Finance.—Public expenditures; financial administration; taxation; public debts. *I;* (3). Professor Bogart

Prerequisite: Economics 1 and 3. Students who have had 6 hours in history and Political Science 1, and who present a statement from the department of political science showing that they are taking political science as a major, may be admitted without Economics 3.

6. Business Organization.—Business enterprises and their organization; individual proprietorship, partnership, and corporation. Organization for operating purposes and the effect of the organization on business and technical efficiency. Commercial and industrial associations. *II;* (2). Mr. Petersen

Prerequisite: Economics 1, and 3 either preceding or concurrent. Open to students of business administration only.

7. English Economic History.—The industrial development of England; the manorial system; the gilds; the commercial policy and expansion of the seventeenth and eighteenth centuries; the industrial and manufacturing growth of the nineteenth century. Open to freshmen and sophomores only. *I;* (3).

Professor Bogart, Dr. C. M. Thompson, and assistants

8. The Money Market.—Money and credit; money broker and banker; the concentration of financial dealings at such centers as New York and London; international payments and rates of foreign exchange; the seasonal demands for money; fluctuation in rates of discount; monetary panics and crises; investments; dealings on the stock and produce exchanges. *II;* (2).

Assistant Professor Weston

Prerequisite: Economics 9. Open to students of business administration only.

9. Practical Banking.—Banking practise in the United States. *I;* (2).

Assistant Professor Weston

Prerequisite: Economics 3; senior standing. Open to students of business administration only.

10. Corporation Management and Finance.—Growth of corporations; causes, and forms of corporations; the promotion, financiering, incorporation, and capitalization of corporate consolidations; their organization and securities;

position and relation of stockholders and directors, analysis of reports, stock speculation, relations of industrial corporations to international competition, receiverships and reorganizations; social and political effects. *II;* (3).
Assistant Professor HEILMAN

Prerequisite: Economics 1 and 3.

[**11. Industrial Consolidation.**—The growth, prices, and methods, the effect of trusts on prices, wages, interest, and profits of monopoly; the control of trusts. *II;* (3). Not given in 1914-15.
Prerequisite: Economics 10.]

12. Labor Problems.—The condition and claims of labor and the principles underlying them. *I;* (3). Assistant Professor HEILMAN
Prerequisite: Economics 1 and 3. Students who have had 6 hours in history and Sociology 1 and who present a statement from the department of sociology showing that they are taking sociology as a major, may be admitted without Economics 3.

13. Economic Development of Europe.—The economic history of France, Germany, and England since the period of the industrial revolution. *II;* (3). Professor BOGART
Prerequisite: At least sixty hours of university work, including Economics 1 and 3. Students who present a statement from the department of history showing that they are taking history as a major, may be admitted without Economics 3.

14. Agricultural Cooperation.—The organization, financing, and management of cooperative associations for the promotion of various branches of farming. Open to junior and senior students of agriculture only. *II;* (2).
Mr. PETERSEN

Prerequisite: Economics 2.

15. Rural Credit.—The credit and banking needs of farmers and rural communities; ways of supplying them. Open to junior and senior students of agriculture only. *I;* (2). Mr. STEWART
Prerequisite: Economics 2.

16. Economic Problems.—A: Railway problems; taxation of corporations; the labor question. C: Special topics relating to agriculture. A open to students of engineering only; C open to students of agriculture only. *II;* Sec. A (2); Sec. C (3). Professor DEWSNUP, Dr. J. G. THOMPSON
Prerequisite: Economics 2.

17. Economic History of Agriculture.—The development of agriculture as an industry. Land tenure and landed property. Farms or estates; extensive and intensive culture; credit and markets; labor. State of the agricultural class; organization; relation to other industries, and to the state. General aspects of farm management. *II;* (2). Dr. J. G. THOMPSON

Prerequisite: Economics 1 and 3 and senior standing. Seniors in the College of Agriculture who have had Economics 1 or 2 may be admitted to the course by special permission of the instructor.

18a-18b. Senior Theses.—Investigation in economics, commerce, and industry; the preparation of theses. Business students and others making economics a major should take this course. *I, II;* (2). Professor DEWSNUP

19. United States Industry, 1820-1860.—Growth, distribution, and character of the population, with reference to the public domain and the Western movement; inland communication and transportation; foreign commerce and the carrying trade; distribution, extent, and methods of agriculture; manufacturing, labor and labor saving machinery; currency and banking; the tariff. *I;* (2). Dr. C. M. Thompson

Prerequisite: Open to graduates and seniors who have had Economics 1 and are taking a major in one of the social sciences.

20. United States Industry Since 1860.—Improved methods of agriculture, and the effect of exploiting new lands; the factory system; the organization of labor; evolution of "big business"; growth of urban centers; mining; immigration and its economic effects; monetary questions; railroads and interstate trade; foreign commerce; the tariff. *II;* (2). Dr. C. M. Thompson

Prerequisite: Open to graduates and seniors who have had Economics 1 and are taking a major in one of the social sciences.

21. Socialism and Economic Reform.—The important socialistic theories. *II;* (3). Assistant Professor Heilman

Prerequisite: Economics 1 and 12.

22. The Economic History of the United States.—Colonization, growth of industry, agriculture, commerce, transportation, and labor. Open to freshmen and sophomores only. *II;* (3).

Professor Bogart, Dr. C. M. Thompson, Dr. J. G. Thompson, and assistants

23. Elementary Law.—Contracts, leases, and landed property. Open to junior and senior students of agriculture only. *II;* (3). Mr. Little

Prerequisite: Economics 2.

25a-25b. Commercial Law.—Contracts; negotiable instruments; agency; partnerships; business corporations; sales of personal property; bailments and carriers; guaranty and suretyship; insurance. The course may not be counted toward a major in economics. *I, II;* (2). Mr. Chase

Prerequisite: At least sixty hours of university credit including Economics 1 and Accountancy 1a-1b.

26. Economic Resources.—Commercial and industrial development; products and industries of different countries; resources and industrial and commercial activities of the United States. Open to freshmen and sophomores only. *I;* (3). Assistant Professor Litman and assistants

27. Modern Industries.—Raw materials; their distribution and economic significance; the leading industries for their utilization; sources of power; investment of capital; employment; production; distribution. Open to freshmen and sophomores only. *II;* (3). Assistant Professor Litman and an assistant

Prerequisite: Economics 26, or an approved high school course in commercial geography.

28. Mechanism and Technique of Domestic Commerce.—Internal trade; wholesale and retail trade organizations; markets, fairs, auctions, stock and produce exchanges; department, mail-order, and cooperative stores; commercial travelers; commercial competition; modern advertising; mercantile credit. *I;* (3). Assistant Professor Litman

Prerequisite: Economics 1, 3 and 26 or 27.

[29. Foreign Commerce and Commercial Politics.—International trade relations, and attempts to solve them; changes in theories and in policies; economic systems (mercantile, free-trade, protective); customs tariffs; commercial treaties; shipping; export trade (commercial museums, consular service). *I;* (3). Not given in 1914-15. Assistant Professor LITMAN

Prerequisite: Economics 1, 3 and 26 or 27.]

[30. Tariff and Customs Regulations of the United States.—Tariff legislation; the present tariff system; the custom house; entry of goods. *II;* (3). Not given in 1914-15. Assistant Professor LITMAN

Prerequisite: Economics 29.]

31. Organization of Foreign Commerce.—Exporting and importing; communication and transportation; the shipping business; duties of consuls. *II;* (3). Assistant Professor LITMAN

Prerequisite: Economics 28.

33. Economics of Insurance.—Historical development and economic aspects. *II;* (2). Professor RIETZ

Prerequisite: Economics 1 and 3.

[34. Property Insurance.—Fire, marine, title, and credit insurance and corporate suretyship. Their technical charcteristics and economic effects. *I;* (2). Not given in 1914-15.

Prerequisite: Economics 1 and 3.]

37. Salesmanship.—Modern sales organizations; selling problems of manufacturers, wholesalers; management of salesmen; study of the practise of individual salesmen. *I;* (3). Mr. MCJOHNSTON

Prerequisite: Economics 1 and 6. Open to students of business administration only.

38. Advertising.—Principles and current practise; cooperation with personal selling; special problems; planning sales campaigns; choice of media; space buying; practise in writing copy. *II;* (3). Mr. MCJOHNSTON

Prerequisite: Economics 1 and 6. Open to students of business administration only.

41. Railway Transportation.—The United States; conditions abroad. The railway system; the relation of waterway and interurban competition to railway development; financial aspects of railway corporation; railway management; combinations; rate-making; relations with state and federal governments; the relation of European railways to the state. *I;* (3). Professor DEWSNUP

Prerequisite: Economics 1 and 3; for engineers, Economics 2.

42. Railway Rates: Their Construction and Regulations.—Rate structure of the United States; the Interstate Commerce Commission; its relation to theories of rate making. *II;* (3). Professor DEWSNUP

Prerequisite: Economics 41.

[43a-43b. Railway Traffic Administration—Organization and methods of management. Registration in the second semester is permitted only to those who obtain credit in the first semester. *I, II;* (2). Not given in 1914-15. Professor DEWSNUP

Prerequisite: Economics 1 and 3. Open to students of business administration only.]

45a-45b. Problems of Railway Operation.—Organization; economic problems of maintenance of way; motive power and equipment; materials and their distribution; train movement; yard and terminal services. Registration in the second semester is permitted only to those who obtain credit in the work of the first semester. Open to students of business administration only. *I, II;* (2). Professor Dewsnup

Prerequisite: Economics 1 and 3.

51. Public Utilities.—Public service corporations; methods of regulation, by franchises, sliding scales, municipal and state commissions; methods of control over accounting, capitalization, and service; the principles of valuation and rate making; recent decisions of commissions; tendencies in regulation. *I;* (3). Assistant Professor Heilman

Prerequisite: Open to graduates and seniors who have had Economics 10.

Courses for Graduates

Every student entering upon graduate work in economics must have had a thoro course in the principles of the science and should also have studied some special part of the field of economics, such as public finance or money and banking.

The department of economics includes general economics, economic history, finance, commerce, and industry.

Complete sets of all the important French, German, English, and American economic and financial journals are on hand; ninety periodicals, foreign and domestic, in economics, finance, commerce, industry, statistics, etc., are currently received. The library is especially strong in railroad literature, economic history, labor, finance, and general theory.

101. Economic Theory.— *Twice a week. I, II; (1 unit).* Professor Kinley

[102. Advanced General Economics.— *Twice a week. I, II; (1 unit).* Not given in 1914-15.] Professor Kinley

[103. Railway Administration.—Current railway management. Primarily intended for candidates for the degree of A. M. in Railway Administration. *Once a week. I, II;* (½ unit). Professor Dewsnup

Not given in 1914-15.]

104. Foreign and Colonial Commerce of the United States.—Government publications. *Twice a week. II;* (*1 unit.*) Assistant Professor Litman

[105. Public Finance.—Public revenue and expenditure. *Twice a week. I, II;* (*1 unit*). Professor Bogart

Not given in 1914-15.]

[106. Railway Policy.—A: Railway development in the United States and B: in foreign countries, particularly in western Europe. C: the state and the railway. The cycle of topics requires three years for the completion of the course. *Once a week. I, II;* (*½ unit.*) Professor Dewsnup

Not given in 1914-15.]

[107. The Corporation in Economic Evolution.— *Once a week. I, II; (¼ unit).* Not given in 1914-15.]

[109. Theory of Industrial Consolidations.—Their nature; the conditions of their development; their effects upon the production and distribution of wealth. *Once a week. I, II;* (*¼ unit*). Not given in 1914-15.]

118. Seminar.—*I, II.* Professor KINLEY and others

120. History of Economic Thought.— *Twice a week. I;* (*1 unit*). Dr. J. G. THOMPSON

122. Advanced Economic History of the United States.—*Twice a week. I, II;* (*1 unit*). Professor BOGART

SUMMER SESSION COURSES

S 2. Principle of Economics.—A survey, with reference to the needs of teachers, general readers and university students. Advanced students of the University who wish to anticipate Economics 2 may do so by taking this course; but it will not be accepted as part fulfillment of Economics 1. (2). Dr. C. M. THOMPSON

Prerequisite: For university students at least 60 hours of university credit; for teachers and other mature students, enrolled for the Summer Session only, the permission of the instructor.

***S 12. History and Problems of Organized Labor.**—The history, aims, ideals, methods, structure, and problems of American labor organizations. (2½). Professor CARLTON

Prerequisite: Senior or graduate standing and eight hours in economics.

S 22. Industrial History of the United States.—Industrial evolution: colonial economy to the industrial organization of the twentieth century. (2½). Professor CARLTON

S 27. Resources and Industries.—The effects of environment and other factors upon economic activities of different countries; extractive, cultivating, and manufacturing industries; their nature, status and importance in the world's trade. (2½). Assistant Professor LITMAN

S 28. Domestic and Foreign Commerce.—Marketing methods; trade organizations; commercial competition; mercantile credit; the purchase and sale of commodities in foreign countries. (2½). Assistant Professor LITMAN

Prerequisite: This course is open (1) to teachers of commercial subjects, and (2) to others who have two years of university credit including Economics 1 and 3, or the equivalent.

B. ACCOUNTANCY

Courses 1, 8, and 9 are open to students in any of the Colleges. Courses 2 and 3 are open to students of business administration only; course 10, to students of engineering only; and course 11, to students of agriculture only. The accountancy courses may not be counted towards a major in Economics.

1a-1b. Elementary and Intermediate Accounting.—The technique and the science of accountancy. If elected this course must be taken throughout the year in order to secure credit. *I, II;* (3). Mr. CHASE, Mr. SCOVILL

Prerequisite: Thirty hours of university credit and registration in Economics 1.

2a-2b.—Advanced Accounting and Auditing.—The technique of bookkeeping as applied in accounting in its more advanced stage. If elected this course must be taken throughout the year in order to secure credit. *I, II;* (3). Mr. CHASE, Mr. SCOVILL

Prerequisite: Accountancy 1a-1b. Open to students of business administration only.

3a-3b. Accounting Problems and Auditing.—Modern business organization such as partnership, corporation, and cost accounting; municipal accounting and the accounting of the amalgamation of companies; auditing. If elected this course must be taken throughout the year in order to secure credit. *I, II;* (2). Mr. Chase

Prerequisite: Accountancy 2a-2b. Open to students of business administration only.

8. Elementary Governmental Accounting.—Use of government reports; governmental accounting. *I;* (2). Professor Frazer

Prerequisite: Accountancy 1a-1b and either concurrent registration or previous credit in Economics 5.

9. Institutional Accounting.—Functional organization; personnel; budgetary control; purchasing; store-keeping; perpetual inventories. *II;* (2).

Prerequisite: Accountancy 1a-1b and eight hours in economics, political science, or sociology. Professor Frazer

10. Shop Management and Cost Keeping.—Types of industries; labor distribution; materials used. Records suitable for each kind of industry; the standpoint of the engineer and shop manager. *II;* (2). Mr. Scovill

Prerequisite: Open only to engineering students who have had Economics 1 or 2.

11. Farm Accounting.—Practical accounting systems for different kinds of farm operations and for different kinds of farming. *I;* (2). Mr. Scovill

Prerequisite: Open to junior and senior students of agriculture only.

EDUCATION

William Chandler Bagley, Ph.D., *Professor*
Lotus Delta Coffman, Ph.D., *Professor*
Charles Hughes Johnston, Ph.D., *Professor*
Horace Adelbert Hollister, A.M., *Professor*
Guy Montrose Whipple, Ph.D., *Associate Professor*
Wilford Stanton Miller, A.M., *Assistant and Secretary*
James Howard Hanger, A.M., *Assistant*
Margaret Vara Cobb, A.M., *Assistant*

SUMMER SESSION ONLY

Lewis Flint Anderson, Ph.D., *Assistant Professor of Education*
Louis W Rapeer, Ph.D., *New York Training School for Teachers*
Alfred Lawrence Hall-Quest, A.M., *Assistant in Education*
Charles Leroy Harlan, A.B., *Assistant in Education*

The courses of the department fall into two general divisions: courses primarily for professional training and courses more specifically designed for general culture. The first division includes courses 1, 4, 9, 10, 11, 15, 18, and 20; the second division, courses 2, 5, 12, 13, and 16. Students majoring in education will be required to take at least three hours in psychology in addition to the requirements in education. Courses 1 and 5 in psychology are especially recommended.

Honors

Candidates for honors in education must offer:

1. A minimum of 18 hours in education and 6 hours in psychology. Teachers' courses, not to exceed 3 hours in all, offered by other departments of the

University, may, with the approval of the department of education, be counted as part of this requirement.

2. Minors in either (1) psychology (at least 9 hours exclusive of the 6 hours counted toward the major) and one subject selected from those that are usually taught in secondary schools, or (2) any two related subjects commonly taught in secondary schools. No course may be counted toward the minimum requirement for minors which may not be counted toward the major requirement in such subjects.

Introductory Courses

1. Introduction to Education.—(a) The American public-school system; (b) the principles and the aim of education; the biological basis, heredity, and environment; instinct, habit and habit-formation; memory, and the higher mental processes. (Required, by Senate ruling, of all students who secure the official indorsement of the Appointments Committee for teaching positions in secondary schools.) *I* or *II;* (4). Professor Bagley, Mr. Miller

Prerequisite: Junior standing.

2. History of Education.—Educational theory and practise as related to the history of civilization; Greek, Roman, medieval, and modern education. Texts: Monroe's *Brief Course in the History of Education;* Anderson's *History of Common School Education. II;* (5). Professor Johnston

Prerequisite: Two years of university work.

Intermediate Courses

10. The Technique of Teaching.—Types of classroom exercises and the preparation of teaching plans; the hygiene of instruction; classroom management; professional ethics; observation in neighboring high schools. (Required, by Senate ruling, of all students who secure the official recommendation of the Appointments Committee for teaching positions in secondary schools.) *I* or *II;* (3). Professor Bagley, Professor Coffman

Prerequisite: Education 1.

16. Social Education.—The school as a social factor in its relation to the home, the church, and the state; the relation of education to child labor, vocation, and crime; the school as a community center; the social composition of student—and teaching—populations; educational extension. *I;* (3). Professor Coffman

Prerequisite: Two years of university work.

Advanced Courses for Graduates and Undergraduates

4. Educational Administration.—Present tendencies in the school systems of typical cities and states; experiments in administration, discipline, and methods of teaching. *I;* (3). Professor Coffman

Prerequisite: Education 1, 2.

5. Comparative Education.—The school systems of the United States, Germany, England, France, and Canada, with emphasis upon secondary schools. *I;* (3). Professor Johnston

Prerequisite: Education 1, 2.

25. Educational Psychology.—Instinct; habit and the acquisition of skill; perception and memory; conception, judgment, and reasoning. Lectures and demonstrations. *I;* (3). Associate Professor Whipple

Prerequisite: Psychology 1 or Education 1.

6. Principles of High-School Education.—The evolution of high schools and of the fundamental conceptions of secondary education; relation of high schools to the state systems; legal status; articulation with the elementary school, the college, the teachnical school, the community, and the home; the teaching staff; reorganization of curriculums; "controls" of construction; direction of student activities. *I;* (3). Professor JOHNSTON

Prerequisite: Education 1.

27. High-School Curriculums.—Curriculum-making; professional supervision; materials, text-books, and other teaching devices; the psychology of high-school branches of study; the framing of curriculums for typical communities. *II;* (3). Professor JOHNSTON

Prerequisite: Education 1.

13-14. Educational Classics.—Educational writings of Plato, Aristotle, Quintilian, Montaigne, Vittorino, Da Feltre, Milton, Locke, Comenius, Rousseau, Pestalozzi, Froebel, and Herbert Spencer. (This course is required of all candidates for advanced degrees in education.) *I, II;* (3).

Associate Professor WHIPPLE

Prerequisite: Education 1, 2.

15. School Hygiene.—School architecture and equipment; the heating, ventilation, and lighting of school buildings; the hygiene of posture, exercise, and fatigue, and of reading and writing; the program of studies and the daily time table; the mental health of teachers and pupils; contagious diseases and the relation of school authorities to health authorities. (Graduate credit subject to approval of Executive Faculty.) *II;* (2). Associate Professor WHIPPLE

Prerequisite: Education 1 (or normal-school graduation, or two years of teaching experience, with at least junior standing).

18. Method in Educational Research.—Methods of educational investigation. (Ordinarily required of all candidates for advanced degrees.) *I;* (2).

Professor COFFMAN

Prerequisite: Education 1.

20a. Theory of Supervision.—The training of teachers in service; the measuring of educational products; qualities of merit and causes of failure; selection of teachers; meetings and other agencies for improving the teaching service. *II;* (3). Professor COFFMAN

Prerequisite: Education 1.

20b. Theory and Practise of Supervision.—Identical with 20a except for the addition of a period each week devoted to the observation and criticism of teaching in elementary and high schools. *II;* (3). Professor COFFMAN

Prerequisite: Education 1.

41. Vocational Education.—Institutions and methods of elementary and secondary vocational education; federal, state, and municipal provisions; recent legislation; present tendencies. *I;* (3). Professor JOHNSTON

Prerequisite: Education 1 (or an equivalent satisfactory to the instructor).

42. Auxiliary Education.—The institutions and methods involved in the training of defectives and delinquents; the Binet-Simon tests and other methods of mental diagnosis; educational treatment of morons and of moral delinquents; an outline of the methods of teaching sensory defectives (the blind and the deaf); public institutions of auxiliary education and their administration. *II;* (3). Associate Professor WHIPPLE

Courses for Graduates

101. Seminar in Educational Theory.—Topic for 1914: Educational values; programs, and the construction of school text-books. *I;* (*1 unit*).
Professor Bagley

[**105. Seminar in History of Education.**—(Not given in 1914-15.)]

106. Seminar in Secondary Education.—Organization, administration, and special methods of secondary education; independent investigation by advanced students. *II;* (*1 unit*). Professor Johnston

104. Seminar in Administration and Supervision.—Reading and discussion of technical monographs on educational administration and supervision, school finance, retardation, measurement of educational products, educational surveys, and the rating of teachers. Each member will report upon some specific phase. *Once a week. II;* (*1 unit*). Professor Coffman

[**111.—Practise Teaching.**—(Not given in 1914-15.)]

112. Principles of Education.—For graduate students not majoring in education who have not taken undergraduate courses in the subject. (1) The American public-school system; (2) principles and doctrines of educational science; and (3) the technique of teaching and the problems of class management. *Twice a week. II;* (*½ unit*). Professor Bagley

119. The Elementary Curriculum.—Elementary-school studies; time allotments; the construction of curriculums. *Three times a week. II;* (*1 unit*).
Professor Coffman

125. Seminar in Educational Psychology.—Marking systems. *Twice a week. I;* (*1 unit*). Associate Professor Whipple

Departmental Conference.—Meeting of graduate students majoring in education with the departmental staff. *(No credit.) I, II.*

SUMMER SESSION COURSES

Education and Psychology

Note: The prerequisites of the following courses may, in the discretion of the instructor in charge of each course, be modified in their application to *teachers* who may desire to enroll in the courses in question.

Teachers who do not wish to matriculate in the University or who cannot enroll as conditioned or as special students may register in the Summer Session for courses *not carrying university credit.* A list of such courses, offered in education and psychology, will be found at the close of the following announcement.

Courses for Undergraduates

S 1a. Principles of Education.—The function of education; formal and informal education; the relation of physical and mental development to the art of teaching; educational values. Bagley's *Educative Process.* (2). Mr. Miller

Prerequisite: Junior standing (but, in the discretion of the instructor, open to teachers who cannot meet this requirement).

S 1b. The Educational System.—The school system of the United State, its organization, origin, and distinctive characteristics, its present problems. Lectures and readings. (1). Professor Bagley

Prerequisite: Junior standing (but, in the discretion of the instructor, open to teachers who cannot meet the requirement).

S 2. History of Education.—Educational theory and practise in their relation to the history of civilization. Monroe's *History of Education: Brief Course.* (2½). Assistant Professor ANDERSON

Prerequisite: Junior standing (but, in the discretion of the instructor, open to teachers who cannot meet the requirement).

S 15. School Hygiene.—The location and construction of school buildings; the hygiene of lighting, heating, and ventilation; school furniture; the hygiene of eyesight and hearing; fatigue; physical defects; communicable diseases. Initial training in the application of tests and diagnostic methods. Terman's *Hygiene of the School Child,* Dresslar's *School Hygiene;* (2). Dr. RAPEER

Prerequisite: Junior standing (but, in the discretion of the instructor, open to teachers who cannot meet this requirement).

S 16. Social Aspects of Education.—The need of a social point of view; social agencies and social forces in relation to the school; the refractive power of the school; the school as a determinant of public opinion. Readings, lectures, and discussions. (2). Professor COFFMAN

Prerequisite: Junior standing (but, in the discretion of the instructor, open to teachers who cannot meet the requirement).

S 25. Educational Psychology.—The biological interpretation of the learning process; heredity in its relation to mental development; the psychology of habit; the acquisition of skill; memory and association; the transfer of training and the doctrine of formal discipline; recent investigations of the higher thought processes. Colvin's *Learning Process.* (2). Mr. MILLER

Prerequisite: Junior standing (but, in the discretion of the instructor, open to teachers who cannot meet this requirement).

Courses for Graduates and Advanced Undergraduates

***S 6. The Principles of High-School Education.**—The evolution of high schools and of the fundamental conceptions of secondary education; relation of the high school to the state system; its legal status; its articulation with the elementary school, the college, the technical schools, the community, and the home. The teaching staff, reorganization of curriculums, "controls" of construction, direction of student activities and the administration of vocational and moral guidance, school journalism, debating activities, athletics and high-school hygiene. (2 *credits* or ½ *unit*). Professor JOHNSTON

Prerequisite: Education 1, or equivalent. (High-school teachers and principals may in the discretion of the instructor be admitted to the course without this prerequisite.

***S 13. Educational Classics.**—The educational writings of Plato, Aristotle, Quintilian, Montaigne, Milton, Locke, Rousseau, Pestalozzi, Herbart, Froebel, Spencer, and others. *(2 credits, ½ unit.)*

Assistant Professor ANDERSON

Prerequisite: Education 2 (History of Education) or equivalent.

***S 20. Supervision.**—(For principals, superintendents, and supervisors.) The limitations, types, functions, standards, and devices of supervision; the use of objective scales in measuring the efficiency of teaching; qualifications and rating of teachers. Lectures, readings, special problems. (2 *credits,* ½ *unit*).

Professor COFFMAN

Prerequisite: Education 1 or equivalent. (Superintendents, principals, and supervisors may in the discretion of the instructor be admitted to the course without the prerequisite.)

***S 27. High School Curriculums.**—Bases of construction; principles of professional supervision; materials, text books and other teaching devices for modern secondary-school work; the psychology of the mental processes involved in selected high-school branches of study; framing of curriculums for typical cities and communities. (*2 credits, ½ unit*). Professor JOHNSTON

Prerequisite: Education 1 or equivalent. (In the discretion of the instructor this course is open to high-school teachers and principals and superintendents without this requirement.)

***S 28. School Health Administration.**—Administration; typical forms of school health administration: sanitation; medical and dental inspection; the school physician and the school nurse; health records and reports. Lectures, readings, and reports. (*2 credits, ½ unit*) (subject to approval of Executive Faculty of Graduate School). Dr. RAPEER

Prerequisite: Education 15 or equivalent preparation satisfactory to the instructor.

Courses for Graduates

***S 101. Seminar in Educational Theory.**—Educational values; determination of "minimal essentials" in elementary and secondary programs *(¼ unit)* (subject to approval of Executive Faculty of Graduate School). Professor BAGLEY

Prerequisite: Graduate standing and at least one course in the principles of education.

***S 104. Seminar in School Administration.**—Present tendencies in school systems of typical states and cities. Readings; reports; special problems. (*¼ unit*). Professor COFFMAN

Prerequisite: Graduate standing.

***S 125. Advanced Educational Psychology.**—Monographic literature on instinct; habit and the acquisition of skill; memory and association. *(¼ unit).* Dr. RAPEER

Prerequisite: Graduate standing and at least one course in general educational psychology.

***S 141. Seminar in Secondary Education: Vocational Problems.**—Professional, polytechnic, commercial, industrial (or trade) and agricultural education and the household arts. Supervision of investigations by advanced students. (*¼ unit*). Professor JOHNSTON

Prerequisite: Graduate standing.

Courses Not Carrying University Credit

A. Principles of Teaching.—The aim of education, the function of the school, types of school exercises (drill lessons, developmental lessons, lessons for appreciation, review lessons, study and recitation lessons), the art of questioning, class management, and school hygiene. *No university credit.* Mr. HALL-QUEST

B. Elementary Educational Psychology.—The meaning of "learning"; experience and heredity in relation of the problem of learning; the nature and classification of instincts; laws of habit-formation; sensation and perception with reference to their educational applications; memory and its laws; imagination and the higher thought processes. *No university credit.* Mr. HARLAN

C. Methods of Teaching in the Elementary School.—Forty lectures on the teaching of the principal subjects of the elementary program. *No university credit.* The tentative distribution of the lectures is as follows:

The Teaching of Reading (four lectures). Professor COFFMAN
The Teaching of Geography (five lectures). Professor CUSHING
The Teaching of Literature (five lectures). Assistant Professor PAUL
The Teaching of Music (three lectures). Assistant Professor SMITH
Manual Training and Handiwork in the Grades (two lectures). Professor PARK
The Teaching of Arithmetic (five lectures). Mr. MILLER
The Teaching of History and Civics (five lectures). Professor BAGLEY
The Teaching of Drawing (three lectures). Miss HILL
The Teaching of Composition and Language (five lectures). Mr. HALL-QUEST

ELECTRICAL ENGINEERING

MORGAN BROOKS, Ph.B., M.E., *Professor*
ELLERY BURTON PAINE, M.S., E.E., *Associate Professor, Acting Head of Department*
EDWARD HARDENBERGH WALDO, A.B., M.S., M.E., *Assistant Professor*
PHILIP SHERIDAN BIEGLER, B.S., *Associate*
LEONARD VAUGHAN JAMES, M.S., E.E., *Associate*
IRA WILLIAM FISK, M.S., E.E., *Associate*
ABNER RICHARD KNIGHT, M.E., *Instructor*
CHARLES RUBY MOORE, B.S., *Instructor*
JOHN WILLIAMS DAVIS, B.S., *Instructor*

4. Elementary Electrical Engineering.—Electrical machinery; selection installation and operation; distribution of power; motor applications. *II;* (2). Professor BROOKS.

Prerequisite: Physics 1a-1b, 3a-3b; junior standing.

6. Alternating Currents.—(For mechanical engineers.) *I;* (2). Not given after 1914-15. Professor BROOKS

Prerequisite: Electrical Engineering 25 or 16.

8. Electric Currents and Apparatus.—Direct and alternating current circuits and machines; storage batteries. (Especially for chemical engineers.) *II;* (3). Professor BROOKS

Prerequisite: Physics 1a-1b, 3a-3b. Registration or credit in Mathematics 7. Registration in Electrical Engineering 68.

[11. Direct Current Apparatus.—Generators, motors, distribution circuits; storage batteries. (For mechanical engineers.) *I;* (3). Not given in 1914-15.

Prerequisite: Physics 1a-1b, 3a-3b, Mathematics 9.]

[12. Alternating Current Apparatus.—Generators and motors, transformers, distribution systems. (For mechanical engineers.) *II;* (3). Not given in 1914-15. Associate Professor PAINE and others

Prerequisite: Electrical Engineering 11, 61.]

14. Alternating Current Apparatus.—Transformers and generators. *I;* (4). Associate Professor PAINE, Mr. JAMES, Mr. FISK

Prerequisite: Electrical Engineering 26, 76.

17. Alternating Current Apparatus.—Synchronous, induction, and commutator motors; rotary converters; distributed inductance and capacity; transient phenomena. *II;* (4). Associate Professor PAINE and others

Prerequisite: Electrical Engineering 14, 24.

24. Electrical Engineering Laboratory.—Advanced current testing. *I;* (2). Mr. BIEGLER, Mr. MOORE, Mr. DAVIS

Prerequisite: Electrical Engineering 76; registration in Electrical Engineering 14.

25. Direct Current Apparatus.—Laws of electric and magnetic circuits; construction and operation of direct current generators and motors. *I;* (4). Mr. FISKE, Mr. KNIGHT

Prerequisite: Physics 1a-1b, 3a-3b; Mathematics 9.

26. Alternating Currents.—A mathematical and graphical treatment of the principles of periodic currents; theory of the simple phenomena in transmission lines and transformers. *II;* (4).

Prerequisite: Electrical Engineering 25.

27. Electrical Engineering Laboratory.—Advanced alternating current testing. *II;* (2). Mr. BIEGLER, Mr. MOORE, Mr. DAVIS

Prerequisite: Electrical Engineering 24; registration in Electrical Engineering 17.

28. Electrical Engineering Laboratory.—Testing of dynamos and motors. (For students in municipal and sanitary engineering.) *I;* (1). Not given after 1914-15. Mr. BIEGLER

Prerequisite: Electrical Engineering 4.

29. Electrical Engineering Laboratory.—Alternating current operation and testing. (For students in mechanical engineering.) *II;* (2). Not given after 1914-15. Mr. MOORE

Prerequisite: Electrical Engineering 6.

55. Electrical Design.—Electromagnets and dynamos, direct and alternating; transformers. *I;* (2). Assistant Professor WALDO, Mr. KNIGHT

Prerequisite: Electrical Engineering 26; registration in Electrical Engineering 14.

56. Electrical Design.—Induction motors and converters. Power plant design. *II;* (4). Assistant Professor WALDO, Mr. KNIGHT

Prerequisite: Electrical Engineering 14.

[**61. Direct Current Laboratory.**—Circuits and machines. (For mechanical engineers). *I;* (1). Not given in 1914-15.

Prerequisite: Registration in Electrical Engineering 11.]

[**62. Alternating Current Laboratory.**—Alternating-current circuits and machines. (For mechanical engineers.) *II;* (1). Not given in 1914-15.

Prerequisites: Registration in Electrical Engineering 12.]

64. Electrical Engineering Laboratory.—Testing of dynamos and motors. *II;* (1). Mr. BIEGLER

Prerequisite: Registration in Electrical Engineering 4.

68. Electrical Engineering Laboratory.—Direct and alternating current circuits and machines. *II;* (1).

Prerequisite: Registration in Electrical Engineering 8.

71-72. Electrical Engineering Laboratory.—The construction of special apparatus or other work approved by the department. (Elective for juniors and seniors.) *I, II;* *(1 to 3). Mr. Moore

75. Electrical Engineering Laboratory.—Direct current laboratory accompanying Electrical Engineering 25. *I;* (2). Mr. Biegler, Mr. Davis

Prerequisite: Registration in Electrical Engineering 25.

76. Electrical Engineering Laboratory.—Determination of the flux and E. M. F. waves of alternators. Alternating current circuits, instruments. *II;* (2). Mr. Biegler, Mr. Davis

Prerequisite: Electrical Engineering 25, 75; registration in Electrical Engineering 26.

90. Lighting.—Electric lamps and other illuminants, and their effective use; interior wiring; methods of distribution. (For architects.) *II (half semester only; see E. E. 92);* (1). Professor Brooks

Prerequisite: Junior standing.

92. Lighting and Wiring.—First half of semester same as E. E. 90. Further study of distribution, fusing, Underwriters' Rules. Motors. (For architectural engineers.) *II;* (2). Professor Brooks

Prerequisite: Junior standing.

95-96. Seminar.—Electrical railroading; illumination; telegraphy; telephony; storage batteries; electric metallurgy. *I, II;* (1).

Associate Professor Paine

Prerequisite: Junior standing.

99. Thesis.—First semester, preliminary reading and investigation; second semester, completion. *II;* (3).

Courses for Graduates

Entrance upon graduate work in electrical engineering presupposes the full undergraduate course in that subject.

101. Advanced Course in Alternating Currents.—The theory of Transient Phenomena; polyphase circuits; measuring apparatus. *Twice a week; I, II; (1½ units).* Associate Professor Paine

103. Electrical Design.—Plans for an electrical machine or apparatus of specified character; or for the arrangement of an electrical plant; or for the installation of such machinery or apparatus. *Twice a week; II; (1 unit).*

Assistant Professor Waldo

104. Telegraphy and Telephony.—*Once a week; I, II; (1 unit).*

Professor Brooks

105. Electrical Engineering Research.—Investigation of electrical phenomena, or tests of some electrical machine, or of a plant of such machines. *Twice a week; I, II; (1 to 3 units).* Associate Professor Paine

106. Illumination.—*Once a week; I, II; (1 unit.)* Professor Brooks

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*In registering for a course with variable credit hours, a student must put down on his study-list, *not* the possible hours, as shown here, but the number of hours for which *he* intends to take the course; e. g., not *2-5*, but *2*, or *3*, or *4*, or *5*.

ENGINEERING

(See Architecture, Civil Engineering, Drawing, Electrical Engineering, Mechanical Engineering, Mechanics, Mining Engineering, Municipal and Sanitary Engineering, Physics; Railway Civil Engineering, Railway Electrical Engineering, and Railway Mechanical Engineering.)

THE ENGLISH LANGUAGE AND LITERATURE

(Including Rhetoric and Public Speaking)

Daniel Kilham Dodge, Ph.D., *Professor*
Thomas Arkle Clark, B.L., *Professor*
Stuart Pratt Sherman, Ph.D., *Professor, and Chairman*
Edward Fulton, Ph.D., *Associate Professor*
Edward Chauncey Baldwin, Ph.D., *Assistant Professor*
Harry Gilbert Paul, Ph.D., *Assistant Professor*
Franklin William Scott, Ph.D., *Assistant Professor, Secretary*
Harrie Stuart Vedder Jones, Ph.D., *Assistant Professor*
Jacob Zeitlin, Ph.D., *Associate*
Charles Henry Woolbert, A.M., *Associate*
Herbert LeSourd Creek, Ph.D., *Associate*
Clarence Valentine Boyer, Ph.D., *Associate*
Gertrude Schoepperle, Ph.D., *Associate*
Martha Jackson Kyle, A.M., *Instructor*
George Frisbie Whicher, A.M., *Instructor*
Clarissa Rinaker, Ph.D., *Instructor*
Easley Stephen Jones, A.M., *Instructor*
Mervin James Curl, A.M., *Instructor*
Harrison McJohnston, A.B., *Instructor*
Harold Newcomb Hillebrand, Ph.D., *Instructor*
Earle Stanley Alden, A.M., *Instructor*
Robert Calvin Whitford, A.M., *Instructor*
Lynn Harold Harris, Ph.D., *Instructor*
Russell Osborne Stidston, Ph.D., *Instructor*
Ralph Earle Tieje, A.M., *Instructor*
Carl Sawyer Downes, Ph.D., *Instructor*
Roger Sherman Loomis, A.M., B.Litt., *Tutor*
Sada Annis Harbarger, A.M., *Assistant*
Ruth Kelso, A.M., *Assistant*
Walter Albert Buchen, A.M., *Assistant*
Lew R Sarett, A.B., *Assistant*
Emerson Grant Sutcliffe, A.B., *Assistant*
Thomas Blaine Stanley, A.B., *Assistant*
Raymond Ephraim Dixon, A.M., *Assistant*
Clyde Byron Beck, A.B., *Assistant*
James Manley Phelps, A.B., *Assistant*

SUMMER SESSION ONLY

Lane Cooper, Ph.D., *Cornell University*
*Thacher Howland Guild, A.M., *Associate*
Arthur Jerrold Tieje, Ph.D., *Instructor*

*Deceased, July 21, 1914.

Major

A student making English a major must take 20 hours in English in addition to Rhetoric 1 and the first semester of English 1 or English 10. These 20 hours must include at least 10 hours in English literature, at least 3 hours in composition, and at least 1 one-year course, or its equivalent, from the advanced group of courses.

A student must also take as one minor at least 20 hours in one foreign language, or in two foreign languages, or in one foreign language and philosophy, or in one foreign language and history.

Honors

Candidates for honors in English must offer:

1. Work in English amounting to 20 hours in addition to Rhetoric 1-2 and the first semester of English 1-2 or 10-11.

2. At least 1 one-year advanced course, which may be in either English literature or English composition.

3. A minimum of 15 hours in English literature in addition to the first semester of English 10-11, and a minimum of 5 hours in English composition in addition to Rhetoric 1-2.

4. Work aggregating 24 hours in two minor subjects, which must be in two foreign languages or in one foreign language and either history or philosophy. French 1a-1b and German 1 and 3 may not be counted toward the fulfillment of the minor requirements.

A. LITERATURE AND LANGUAGE

Elementary Courses

1-2. Survey of English Literature.—(Credit is not given for either semester separately, or for the course in addition to course 10-11 or course 20. Only one semester's work is credited toward a major in English.) *I, II;* (4).

Professor Sherman, Assistant Professor Baldwin, and others

Prerequisite: A year's college work.

10-11. Introduction to Literature.—*(First semester.)* The Forms of Poetry. *(Second semester,)* The Forms of Prose Literature. (This course is intended only for those who expect to include a considerable amount of literature, in English or some other language, in their curriculum. Credit is not given for the course in addition to course 1-2 or course 20. Only one semester's work is credited toward a major in English. Credit is not given for the first semester separately.) *I, II;* (3).

Professor Dodge, Assistant Professor Paul, and others

Prerequisite: The minimum entrance requirements in English.

12-13. American Literature.—(Credit is not given for either semester separately.) *I, II;* (2). Assistant Professor Paul

Prerequisite: English 1-2 or 10-11.

17. The English Language.—Its history; characteristics and usage of modern English. *I;* (3). Associate Professor Fulton

Prerequisite: Rhetoric 1-2.

20. Chief English Writers.—(For those whose program admits of but one semester's work in English, and who therefore may not register for course 1. It is not accepted, like course 1, as a prerequisite for more advanced courses. Credit is not given for the course in addition to course 1-2 or course 10-11. *I* or *II;* (4). Dr. Boyer (in charge), Assistant Professor Scott and others
Prerequisite: A year's college work.

23. Introduction to Shakespeare.—*I* or *II;* (3). Professor Sherman
Prerequisite: English 1-2 or 10-11.

Intermediate Courses

Prerequisite: Eleven hours of English literature, or eight hours of English literature and eight hours of a foreign language.

21-22. Literary Study of the Bible.—Hebrew literature as an expression of the life of the race that produced it; the debt, both ethical and artistic, of modern life to ancient Hebrew thought. (Either semester may be taken separately.) *I, II;* (3). Assistant Professor Baldwin

24. English Literature of the Victorian Period.—*II;* (3). Miss Kyle

29. English Literature from 1557 to 1688, Exclusive of the Drama.—*I;* (3). Assistant Professor Baldwin

31. English Literature from 1688 to 1789.—*II;* (3).
Assistant Professor Paul

32. The Greater English Critics of the 19th Century.—*II;* (3).
Associate Professor Fulton

33. English Literature from 1789 to 1837.—*I;* (3). Dr. Zeitlin

Advanced Courses for Undergraduates and Graduates

Prerequisite: Sixteen hours of English literature. These courses, however, are open to any junior or senior with the approval of the instructor concerned.

3. The Poetry of Milton.—Origins, forms, artistic and ethical values; Milton's place in English literary history. *II;* (3). Assistant Professor Baldwin

5. Shakespeare.—Intensive study of a few plays, with emphasis on *Hamlet. II;* (3). Professor Dodge

25-26. Chaucer and His Contemporaries.—(The first semester, dealing with Chaucer exclusively, may be taken for separate credit.) *I, II;* (3).
Assistant Professor Jones

8-9. Old English (Anglo-Saxon).—Grammar; prose; short poems; *Beowulf.* (The first semester may be taken separately.) *I, II;* (3).
Professor Dodge

27-28. Studies in the History of Journalism.—*I; II;* (2).
Assistant Professor Scott

41-42. Teachers' Course.—Methods of teaching English literature and composition in the high school. (Not credited toward advanced degrees, or toward a major in English. Either semester may be taken separately.) *I, II;* (2). Assistant Professor Paul

18. Modern English Grammar.—Sentence structure and analysis; grammatical categories; English syntax. *II;* (3). Dr. Zeitlin

35-36. The English Drama (exclusive of Shakespeare).— *(First semester):* from the beginning to 1600. *(Second semester):* from 1600 to 1700. (Either semester may be taken for separate credit.) *I, II;* (3).

Professor Dodge, Professor Sherman

38. The Arthurian Tradition in England.—Primitive elements; the historical Arthur; Celtic, French, and Italian influences; the tradition in England from the early romances to Arnold. *II;* (3). Dr. Schoepperle

39. Introduction to the Literature of the Middle Ages.—European culture from the fourth century; the relation of English and continental literature, to the fourteenth century. *I;* (3). Dr. Creek

Courses for Graduates

101. Research in Special Periods.—Competent graduate students are encouraged to seek the advice and assistance of the department of English and to submit to the department plans for study in the language or literature of the periods mentioned below.

A. Anglo-Saxon language and literature.....Professor Dodge, Dr. Zeitlin
B. Thirteenth and Fourteenth Centuries.....
Assistant Professor H. S. V. Jones
C. Sixteenth Century .....Professor Dodge
D. Seventeenth Century .....Assistant Professor Baldwin
E. Eighteenth Century.....Professor Sherman, Assistant Professor Paul
F. Nineteenth Century...Professor Sherman, Associate Professor Fulton

108. The English Epic.—The 16th, 17th, and 18th Centuries, from the point of view of classical theory. *Twice a week. I, II; (1 unit).*

Associate Professor Fulton

109. German and Scandinavian Influences on English Literature of the Eighteenth and Nineteenth Centuries.—*Twice a week. I; (1 unit).*

Professor Dodge

110. Old English (Anglo-Saxon) Poetry.—*Twice a week. I, II; (1 unit).*

Professor Dodge

113. Historical Prose Syntax.—The forces, native and foreign, in the development of English prose sentence structure. *Twice a week. I, II; (1 unit).* Dr. Zeitlin

126. English Ballads and Metrical Romances.— *Twice a week. I, II; (1 unit).* Assistant Professor Jones

135. Problems in American Literature.—*Twice a week. I, II; (1 unit).*

Assistant Professor Paul

137. Nineteenth Century Prose Writers.—The relation of literature to social forces; the works of Mill, Carlyle, Newman, Ruskin, Arnold, and Pater. *Twice a week. I, II; (1 unit).* Professor Sherman

138. Old Irish.—Selections from the glosses and from the Táin bo Cualnge; lectures on Old and Middle Irish literature. *Twice a week. I; (1 unit).* Dr. Schoepperle

B. RHETORIC

Elementary Courses

1-2. *Rhetoric and Themes.—Required for students in the Colleges of Liberal Arts and Sciences, Engineering, and Agriculture. *I, II;* (3).
Assistant Professor Scott in charge

Prerequisite: The minimum entrance requirements in English.

For the benefit of those whose course is irregular, a limited number of sections in each semester take up the work of the other semester. The course is not counted toward a major in English.

Intermediate Courses

3. English Composition.—Short themes, with an occasional long theme. *I* or *II;* (3). Dr. Zeitlin, Miss Kyle, Mr. Curl

Prerequisite: Rhetoric 1-2.

6. Narrative Composition.—Short story writing. (Intended for those who have some aptitude for literary work.) *I;* (3). Mr. Curl

Prerequisite: Two years of college work and the consent of the instructor.

10. Business Writing.—Business correspondence; incidental writing and summaries. Lectures; discussion. (In the second semester open only to those taking a business course, except by special permission. Not counted toward a major in English.) *I* or *II;* (2).
Mr. McJohnston, Mr. Warnock, Mr. Stanley

Prerequisite: Rhetoric 1-2.

12-13. Newspaper Writing.—News writing; interviewing, and reporting; news correspondence; news form; news value; typography; proof reading. *I, II;* (3). Mr. Buchen

Prerequisite: Rhetoric 1-2.

19. Agricultural News Writing.—Class exercises; lectures; gathering and preparing material for agricultural papers. *II;* (3).
Assistant Professor Scott

Prerequisite: Junior or senior standing in the College of Agriculture; Rhetoric 1-2.

21. Sales Correspondence.—The principles underlying successful sales letter writing; planning the campaign; the follow-up letter; analysis of markets. *I;* (2). Mr. McJohnston

Prerequisite: Rhetoric 10. Open to students in business administration only.

22. Summarizing and Abstracting.—Summarizing, briefing, and making reports; abstracts of correspondence on file; summarizing of commercial and economic data. *II;* (2). Mr. McJohnston

Prerequisite: Rhetoric 10. Open to students in business administration only.

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*Students who show by examination a proficiency in composition sufficient to qualify them for Rhetoric 2 may be excused from the first semester's work. The examination for those desirous of meeting this qualification will be given at 7 p. m., September 20.

Students who show in the first two weeks that they are not prepared to do composition work of collegiate grade will be assigned to a special course parallel to Rhetoric 1, but involving additional work.

25-26. Senior Conferences (Business Courses).—Each senior will present to the instructor all the written papers presented during the year in his different courses for review and criticism by the instructor. Rewriting of such papers may be required if, in the opinion of the instructor, they are open to serious criticism. (Required of all seniors in the Courses in Business Administration.) *I, II;* (1). Mr. McJohnston

Advanced Courses for Undergraduates and Graduates

8. Interpretive Reading.—(For advanced students and teachers. Credit is given only to students registered also in some advanced course in literature, such as English 3, 5 or 41-42. Not credited toward advanced degrees.) *II;* (1). Mr. Woolbert

Prerequisite: Public Speaking 1.

15-16. Advanced Newspaper Writing.—Problems in reporting; application of principles of history, economics, and political science to current public events; editing; editorial writing. *I, II;* (3). Assistant Professor Scott

Prerequisite: Rhetoric 12-13 or the consent of the instructor.

17. Advanced Composition.—Practise writing, study of structure; criticism of current periodical literature; the developing of material for reports and magazine articles. (Open to a limited number of students and only on recommendation.) *II;* (3). Mr. Whicher

Prerequisite: Two years of college work.

C. PUBLIC SPEAKING

1-2. Oral Expression.—Elocution and platform manner; effective public address; the interpretation of forensic and dramatic literature. *I, II;* (2). Mr. Woolbert, Mr. Sarett, Mr. Phelps

Prerequisite: Rhetoric 1-2.

3-4. Argumentation and Debate.—Argumentative discourse; methods of meeting an opponent; a study of (1) methods of selecting and arranging material for forensic contests, (2) methods of attack and refutation, and (3) practise on the floor in actual debate. *I, II;* (3). Mr. Woolbert, Mr. Sarett

Prerequisite: Public Speaking 1-2.

5-6. Forms of Public Address.—Methods of composition and delivery, the psychology of persuasion, including (1) the sources of belief, (2) the steps necessary in inducing response, (3) the processes of analysis and synthesis, (4) the laws governing attention, interest, and impulse, and (5) the study of tendencies that actuate men as individuals and as crowds. *I, II;* (2). Mr. Woolbert

7-8. A Study of Orators and Oratory.—The lives, times, and speeches of distinguished speakers; required readings and reports, both written and oral; discussions; topical speeches and declamations, *I, II;* (2). Mr. Woolbert

Prerequisite: Public Speaking 1-2.

SUMMER SESSION COURSES

A—Literature and Language

S A. Preparation for the State Examination in English.—Nineteenth century literature, the laws of versification and the principles of composition as taught in secondary schools. *No university credit.* Dr. Tieje

S 1a. Survey of English Literature.—From Chaucer to Milton. Lectures, readings, and conferences. *Century Readings in English Literature* (Part 1). (2.) Dr. CREEK

Prerequisite: Entrance credit in English.

S 1b. Survey of English Literature.—From Dryden to Burns. Lectures, readings, and conferences. *Century Readings in English Literature* (Part 1). (2). Mr. BUCHEN

Prerequisite: Entrance credit in English.

S 16. American Literature.—Bryant, Irving, Cooper, Hawthorne, Emerson, Poe, Longfellow, Whittier, Lowell. Lectures, discussions, readings, and reports. Page's *Chief American Poets.* (2.) Assistant Professor PAUL

Prerequisite: One year of college English or an equivalent.

S 17. The English Language.—Its history, and relations to other languages; characteristics and usage of modern English. Emerson's *Brief History of the English Language.* (2.) Professor DODGE

Prerequisite: One year of college English or an equivalent.

***S 5. Shakespeare.**—Selected plays, with special emphasis on *Hamlet.* Lectures and discussions. Neilson's *Shakespeare* (Cambridge Poets). (2.) Professor DODGE

Prerequisite: Two years of college work or an equivalent.

***S 45. Modern Drama.**—Significant movements and plays of the nineteenth century; continental drama in translation. Lectures and discussions. Mr. GUILD

Prerequisite: Two years of college work or an equivalent.

S 15. English for Teachers.—Literature and fine art; modern literature in relation to the ancient classics; literary types; the problem of teaching literature composition; private reading and study on the part of teachers; the library of the teacher of English. Lectures, readings, and discussions. (2½). Assistant Professor COOPER

Prerequisite: The consent of the instructor.

***S 3. Introduction to Milton.**—Preliminary reading; selections. Lectures, discussions, and original investigations. *The Oxford Milton.* (2½). Assistant Professor COOPER

Prerequisite: Two years of college English or an equivalent.

***S 110. Old English (Anglo Saxon) Poetry.**—Readings and individual investigations. Professor DODGE

Prerequisite: English 8 or a similar introductory course in Old English.

***S 136. The Rise of Classicism.**—The beginnings of classicism in Italy, France and England; its development in England between 1660 and 1726. Lectures, readings, investigation of assigned topics. Assistant Professor PAUL

Prerequisite: Graduate standing or the permission of the instructor.

B—Rhetoric

S 1a. Rhetoric and Themes.—Structure; grammar; punctuation; the sentence; the reasoning processes. Two short themes a week and an occasional long theme. Oral and written exercises. Woolley's *Handbook of Composition* and Scott and Denney's *Paragraph Writing.* (3.) Mr. BUCHEN

Prerequisite: Entrance credit in English.

S 1b. Rhetoric and Themes.—Argumentation, narration, and description. Two short themes a week, with one or two long briefs and long arguments. Oral and written exercises. Scott and Denney's *Paragraph Writing.* (3.)
Prerequisite: Entrance credit in English. Dr. CREEK

S 18. Oral English.—Oral interpretation as an aid in the study and teaching of English; oral composition, school dramatics, and other problems of the teacher. (2.) Mr. GUILD
Prerequisite: The consent of the instructor.

S 20. Advanced Composition.—Long expository themes; Steeves and Ristine's *Representative Essays in Modern Thought.* (2.) Dr. TIEJE
Prerequisite: The consent of the instructor.

ENTOMOLOGY

(See also BOTANY, PHYSIOLOGY, and ZOOLOGY.)

STEPHEN ALFRED FORBES, Ph.D., LL.D., *Professor*
ALEXANDER DYER MACGILLIVRAY, Ph.D., *Associate Professor*
JUSTUS WATSON FOLSOM, D.Sc., *Assistant Professor*
ROBERT DOUGLAS GLASGOW, Ph.D., *Instructor*
ALVAH PETERSON, A.M., *Assistant*

Entomology as taught at the University is distinctly differentiated from the work in zoology. Students preparing for service as economic entomologists should take as many of the courses offered as possible, including especially 2, 3, 4, 7, 8, 14, and 108. Those preparing for the teaching of zoology should take either 2 and 4 or 3 and 4, or all three of these courses.

1a-1b. Elementary Entomology.—Lectures; laboratory; field work; (Open to all students.) *I, II;* (2). Assistant Professor FOLSOM, Dr. GLASGOW

2. General Entomology.—Field entomology, morphological and physiological entomology; the collection and preservation of specimens; typical insects; the adaptive structures and their utilities. (This course and course 3 form a year's work, covering the whole field. Either may be taken independently of the other.) *I;* (5). Assistant Professor FOLSOM, Dr. GLASGOW
Prerequisite: Entomology 1a-1b, or 4a-4b or equivalent.

3. General Entomology.—The classification and determination of insects; life histories in the insectary and by field observation; ecological relations of insects. *II;* (5). Assistant Professor FOLSOM, Dr. GLASGOW
Prerequisite: Entomology 1a-1b, or 4a-4b, or equivalent.

4a-4b. Introduction to Economic Entomology.—Lectures; field work; laboratory. *Section A* for students of agriculture. *I; first half;* (2). *Section B,* for students of horticulture. *II; second half;* (3).
Assistant Professor FOLSOM, Dr. GLASGOW

5. Introduction to Research.—Preparation for thesis work. Library, language, manuscript, and advanced laboratory work on assigned topics. (A three-hour course for one semester is required as a preparation for thesis work.) *I* or *II;* *(3 to 5).
Associate Professor MACGILLIVRAY, Assistant Professor FOLSOM
Prerequisite: Entomology 2, 3; or 15, 7.

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*In registering for a course with variable credit hours, a student must put down on his study-list, *not* the possible hours, as shown here, but the number of hours for which *he* intends to take the course; e. g., not *2-5,* but *2,* or *3,* or *4,* or *5.*

6a-6b. Thesis Investigation.—Subjects selected during the junior year. Three hours a day given to investigation, under the supervision of an instructor, during the senior year. *I, II;* (5).

Associate Professor MacGillivray, Assistant Professor Folsom

7. Systematic Entomology.—External anatomy of insects; terminology of the parts; identification of specimens. *I* or *II;* (5).

Associate Professor MacGillivray

Prerequisite: Entomology 2, or 15.

8a-8b. Advanced Economic Entomology.—Assigned problems. Field laboratory, insectary, library, and manuscript work, with practise in the special operations of economic entomology. (Intended primarily to prepare students for service as entomologists in experiment stations and other state and government positions. Agronomy 7 and Horticulture 1, 2 and 3 should also be taken as a part of this preparation.) *I, II;* (3).

Assistant Professor Folsom, Dr. Glasgow

Prerequisite: Entomology 4a-4b, 2, 3.

9. Advanced Systematic Entomology.—The identification of the characters upon which genera and species are based. *I* or *II;* (5).

Associate Professor MacGillivray

Prerequisite: Entomology 2 or 15, and 7.

10. Taxonomy of Immature Insects.—*I;* (5).

Associate Professor MacGillivray

Prerequisite: Entomology 2 or 15, and 7.

11. Classification of the Coccidae.—Methods of preparing scale insects for study, the identification of genera and species, and discussion of their morphology, metamorphosis and phylogeny. *II;* (5).

Associate Professor MacGillivray

Prerequisite: Entomology 2 or 15, and 7.

12a-12b. Seminar.—Reports and discussion upon assigned topics; presentation and discussion of recent entomological publications, and of results of personal research. *I, II;* (1).

Prerequisite: One year of entomological work.

13. Medical Entomology.—Insects and the transmission of disease; methods of control; prevention. (Primarily for advanced students preparing for medicine.) *I* or *II;* (3). Assistant Professor Folsom

Prerequisite: Zoology 3 or its equivalent in microscopical technique.

14. Advanced Economic Entomology.—Personal work under direction on assigned problems in economic entomology, intended to prepare advanced students for immediate service as state and government entomologists. Advantage will be taken of the operations and practical problems of the State Entomologist's office so far as available. *I* or *II, and six weeks of summer vacation.*

Prerequisite: Courses in elementary and advanced economic entomology, and in systematic entomology.

15. Elementary Systematic Entomology.—Lectures on the characteristics of the orders, suborders, and more important families; habits of representative species; field collections and laboratory studies on the anatomy and classification of insects. *I;* (5). Associate Professor MacGillivray

16a-16b. Apiculture.—Bee-keeping. Practical operations, experiments, and collateral reading. *I, II;* (1). Assistant Professor FOLSOM

NOTE.—16a and 16b may be taken separately. Both will be given each semester.

Courses for Graduates

The prerequisite for graduate work in entomology is one year's work in biological courses, including an equivalent of either Zoology 1 or Entomology 1 or 4. Entrance upon major work in entomology requires the equivalent of Entomology 2 and 3.

Graduate students who have had at least one year of college work in biological courses may take for graduate credit any of the preceding courses except 1, 4, and 6. The following courses are open to graduate students only.

102. Research in the Morphology and Embryology of Insects.—*Twice a week. I, II; (1 or 2 units).* Assistant Professor FOLSOM

103. Research in Faunistic and Ecological Entomology.—*Once or twice a week; I, II; (1 or 2 units).* Professor FORBES

107. Systematic Entomology.—*Five times a week; I, II; (1 or 2 units).* Associate Professor MACGILLIVRAY

108. Research in Economic Entomology.—*Once or twice a week; I, II; (1 or 2 units).* Professor FORBES

109. Research in Systematic Entomology.—*Twice a week; I, II; (1 or 2 units).* Associate Professor MACGILLIVRAY

SUMMER SESSION COURSES

S 1. General Field and Laboratory Course.—For high-school teachers. Lectures, laboratory studies, and field observations. Folsom's *Entomology with Reference to its Biological and Economic Aspects.* (2). Assistant Professor FOLSOM

***S 2. Advanced Course.**—Several lines of advanced entomological study (2 or 3). Assistant Professor FOLSOM

S 3. Economic Entomology.—Activities and control of injurious insects. Laboratory; field trips; lectures. (3.) Assistant Professor FOLSOM

Equivalent: Entomology 4.

***S 4. Advanced Economic Entomology.**—Problems to prepare advanced students for service as state and government entomologists. Study of the current operations of the State Entomologist's Office. (3.) Professor FORBES, Assistant Professor FOLSOM

Prerequisite: 15 hours' credit in general and economic entomology.

FINE ARTS

(See ART AND DESIGN and MUSIC. Attention is called also to the courses in ESTHETICS offered by the departments of PHILOSOPHY, EDUCATION, ARCHITECTURE, and HOUSEHOLD SCIENCE.)

FLORICULTURE

(See Horticulture.)

FRENCH

(See Romance Languages and Literature.)

GEOLOGY

(Including Mineralogy, Paleontology, and Physical Geography. For Summer Session Courses, see Physiography.)

Charles Wesley Rolfe, M.S., *Professor*
William Shirley Bayley, Ph.D., *Professor*
Thomas Edmund Savage, Ph.D., *Assistant Professor*
John Lyon Rich, Ph.D., *Instructor*
Clarence Samuel Ross, A.B., *Assistant*
Mason K Read, A.B., *Assistant*
James Storer, A.M., *Assistant*
Henry Methusalem DuBois, A.M., *Assistant*

Note.—The undergraduate courses offered by the department of geology are grouped as follows: A. Geology, courses 1-4, 12, 13a, 13b, 15, 19, 21, 22, 26a, 26b. B. Stratigraphy, courses 1, 1a, 9, 15, 16, 17, 21, 22. C. Mineralogy, courses 2, 5, 5a, 6, 7. D. Physiography, courses 8, 10, 11, 14, 23, 24, 55.

Note.—Credit is given in only one of the following courses: 1, 3, 12, 13a, 13b.

1. Dynamic and Structural Geology.—The agents and processes involved in the development of the earth's present features. Lectures; laboratory. *I;* (5). Professor Rolfe and assistant

Prerequisite: Chemistry 1 or an equivalent.

1a. Historical Geology.—The evolution of the earth and its life. Lectures; laboratory work. (Continuing course 1 and introducing courses 9 and 16.) *II;* (5). Professor Savage

Prerequisite: Geology 1 or 3.

2. Economic Geology.—Minerals and rocks of economic importance, especially those of North America. Lectures; laboratory. *II;* (3). Professor Bayley

Prerequisite: Geology 5 and 1 and 1a, or 13a and 13b.

3. General Geology.—Mineralogy; dynamic, historic, and economic geology; minerals; rocks; contour maps; fossils. Recitations; laboratory. (For students who wish to devote but one semester to geology.) *I* or *II;* (5). Professor Rolfe

4. Thesis Course.—Field or laboratory problems; reports; maps, sections and figures based on observations. *II;* (5). Professor Rolfe, Professor Bayley, Assistant Professor Savage

5. Mineralogy.—Ores and minerals of scientific importance; crystallography; characteristics of 125 of the most important minerals; blow pipe analysis. Lectures; laboratory. *I;* (5). Professor Bayley

Prerequisite: Chemistry 1, 2, 3.

5a. Mineralogy.—The silicates. Lectures and laboratory. *II;* (3). Professor Bayley

Prerequisite: Geology 5.

8. Physiograpy of Europe.—Physiographic features of Europe; climate; resources; the influence of geographic factors on industries and distribution of population. *II;* (3). Dr. Rich

Prerequisite: Geology 23 and 14.

10. Physiography of South and Central America.—A regional study; physiography, climate; resources. *II;* (3). Dr. Rich

Prerequisite: Geology 23 and 14.

11. Physiography of North America.—Typical physiographic provinces of North America; the United States. Lectures, readings, and maps. *I;* (3). Dr. Rich

Prerequisite: Geology 23 and 14.

12. Geology of Soils.—Classes of soils; mineral compositions; physical characteristics; transformations. (For students of agriculture and those interested in plant growth.) *II;* (5). Professor Rolfe

Prerequisite: Chemistry 1 or an equivalent.

13a. Engineering Geology.—Mineralogy and lithology. Open only to students in Engineering and Ceramics. Lectures; laboratory. *I;* (3). Professor Bayley

13b. Engineering Geology.—Dynamic and structural geology. Open only to students in Engineering and Ceramics. Lectures; laboratory. *II;* (3). Professor Bayley

14. Meteorology.—The heating and cooling, pressure, circulation, and moisture of the atmosphere; storms, and storm and weather forecasting; rainfall, climate. (Course 14 should be taken by those who intend to do more than the most elementary work in geography, and should be taken with Economics 26 by students of commerce.) *I;* (3). Dr. Rich

[**19. Field Geology.**—Not given in 1914-1915.]

21. Geology of Coal.—Origin; age, distribution, and stratigraphy of the deposits of North America, with emphasis on the Illinois or Eastern Interior basin. *I;* (2). Professor Savage

Prerequisite: Geology 13b or an equivalent.

22. Organic Evolution.—The evolution of plant and animal forms as indicated by the fossil record. *II;* (3). Professor Savage

Prerequisite: Geology 1a, or one semester of zoology or botany.

23. Physiography of the Lands.—Land forms; origin, development, and classification; the relation between surface forms and rock composition and structure; the influence of climate on land forms. This course follows Geology 3 and presupposes a knowledge of the principal geologic processes. *II;* (5). Dr. Rich

Prerequisite: Geology 3 or 13a and 13b or 1.

24. Physiographic Interpretations.—The application of physiographic principles to the interpretation of recent earth history; erosion planes; drainage modifications; physiographic indications of climatic fluctuations. This course naturally follows Geology 23, but requires in addition a knowledge of stratigraphic geology. *I;* (3). Dr. Rich

Prerequisite: Geology 23 and 1a.

[26a-26b. **Seminar.**—Weekly meetings, reports, and discussions of the current literature of geology, mineralogy, and physiography. Open to all students registered in the department; credit will be given only to those having 10 hours of completed work in geology. *I, II;* (1). Not given 1914-15.]

Surveying for Geological Students.—*I;* (3). (See Civil Engineering 33.)

Topographical Surveying for Geological Students.— *II;* (3). (See Civil Engineering 34.)

Courses for Advanced Undergraduates and Graduates

6. Physical and Optical Mineralogy.—Introduction to petrography. The physical and optical properties of minerals with reference to symmetry. Polarized light and its practical use in identifying the rock-forming materials. *I;* (3). Professor Bayley

Prerequisite: Geology 5, 5a.

7. Petrography.—The principles of mineralogy applied to the study of rocks. Lectures on origin and classification; laboratory. *II;* (3). Profesor Bayley

Prerequisite: Geology 6.

9. Paleontology.—Invertebrate fossils, classification and relationships. Identification of the fossils; literature of the subject. *I;* (5). Professor Savage

Prerequisite: Geology 1a; recommended: 1 year of botany or zoology.

15. Structural Geology.—Arrangement and distribution of the rocks forming the earth's crust; mountains; faults; folds; other diastrophic phenomena. *I;* (3). Professor Bayley

Prerequisite: Geology 1a.

16. Stratigraphy.—Principles of classification of rock formations, of the methods and criteria employed in their correlation, of the index fossils of the successive geologic formations and their distribution, and of their use in the interpretation of geological provinces. *II;* (5). Professor Savage

Prerequisite: Geology 9.

17. Principles of Stratigraphy.—Sedimentary rocks and associated deposits; kinds; composition; origin; mode of occurrence; geologic interpretation. *I;* (5). Professor Savage

Prerequisite: Geology 16.

[**25. Physiography of the Mississippi Valley.**—The physiography of the Mississippi Valley, with field trips to southern Illinois, eastern Missouri, the Baraboo Ridges of Wisconsin, or the Lexington dome of Kentucky. *II;* (3). Not given in 1914-1915; to be given in 1915-1916.

Prerequisite: Geology 24 or an equivalent, and senior or graduate standing.]

Courses for Graduates

The first prerequisite for graduate work in Geology is the equivalent of the complete undergraduate offerings in that branch of the subject in which specialization is desired. Those who wish to specialize in paleontology should have, in addition, at least an elementary knowledge of systematic zoology; those who wish physical geography should have a knowledge of general physics and chemistry; and those who expect to pursue work in petrography and economic geology should be well grounded in general physics, inorganic chemistry, and the elements of physical chemistry. All graduate students should be sufficiently

acquainted with German and French to be able to read the journals printed in these languages.

101. Advanced Crystallography.—Methods used in measuring, prospecting, and calculating crystal forms and determining the physical properties of crystallized bodies. *Three to five times a week. I, II; (1 unit).*

Professor Bayley

102. Petrography.—The igneous and fragmental rocks; identification of types, classification and relationships. Lectures; laboratory. *Twice a week; I, II; (1 unit).* Profesor Bayley

103. The Crystalline Schists and Other Metamorphic Rocks.—Processes of metamorphism. Lectures; laboratory. *Twice a week; I, II; (1 unit).*

Professor Bayley

105. Invertebrate Paleontology.—Invertebrate fossils, or the fossils of a special geological system; their geographic distribution and geologic range with reference to stratigraphy. Largely individual work. *One to three times a week; I, II; (1 unit).* Professor Savage

106. Areal and Stratigraphic Geology.—A systematic study of the geology and paleontology of a selected area in Illinois. A report on the geology of the region, based on the data collected in the field. *One to three times a week; I, II; (1-2 units).* Professor Savage

107. Areal and Structural Geology.—Individual work on some area exhibiting important structural or economic features. *Once a week; I, II; (2 units).* Professor Bayley

124. Advanced Physiography.—Individual work on field problems; study and discussion of the literature of physiography and geomorphology. *One to three times a week; I, II; (1 unit).* Dr. Rich

GERMANIC LANGUAGES AND LITERATURE

(Including Scandinavian.)

Julius Goebel, Ph.D., *Professor*
Otto Eduard Lessing, Ph.D., *Professor*
George Tobias Flom, Ph.D., *Associate Professor, Scandinavian*
George Henry Meyer, A.M., *Assistant Professor*
Neil Conwell Brooks, Ph.D., *Assistant Professor*
Leonard Bloomfield, Ph.D., *Assistant Professor, Comparative Philology*
Daisy Luana Blaisdell, A.M., *Instructor*
Charles Marshall Poor, Ph.D., *Instructor*
Charles Allyn Williams, Ph.D., *Instructor*
Armin Hajaman Koller, Ph.D., *Instructor*
Philip Stephan Barto, Ph.D., *Instructor*
Alexander Green, Ph.D., *Instructor*
Adolf Eduard Zucker, A.M., *Assistant*
George Washington Spindler, A.M., *Assistant*

SUMMER SESSION ONLY

Felix Emil Held, Ph.D., *Assistant*

A. GERMAN

Honors

Candidates for honors in German must offer:

1. A minor of at least 12 hours in some other language; if this be English it must be exclusive of English 1 and work in Rhetoric; if it be French or Spanish it must be exclusive of the first year's work.

2. A minor of at least 12 hours in any one of the other humanities, provided that the courses chosen contribute in a reasonable degree to the student's knowledge of European civilization. In order to be sure that the work offered will be accepted as fulfilling this general purpose, students are urged to consult with the department in planning their work in their minor subjects.

3. A general knowledge of European history, such as is gained from History 1, or an equivalent course.

4. An acceptable thesis; it may be one written in connection with some course.

First-Year Courses

1. Elementary Course.—Grammar and easy reading for beginners. (One section is offered in the second semester for students who enter the University in the second semester.) *I;* (4).

Assistant Professor MEYER, Assistant Professor BROOKS, Assistant Professor BLOOMFIELD and others

2. Narrative and Descriptive Prose.—Grammar and reading. *I;* (4).

Dr. POOR, Dr. KOLLER, Dr. GREEN, Mr. SPINDLER

Prerequisite: One year of high school of German or German S 1.

3. Narrative and Descriptive Prose.—Grammar and reading. (Continuation of German 1.) *II;* (4).

Assistant Professor MEYER, Assistant Professor BROOKS, Assistant Professor BLOOMFIELD and others

Prerequisite: German 1.

4. Descriptive and Historical Prose.—Selections from standard writers; sight reading; prose composition. *I* or *II;* (4).

Miss BLAISDELL, Dr. POOR, Dr. WILLIAMS, Dr. KOLLER, Dr. BARTO, Dr. GREEN, Mr. ZUCKER

Prerequisite: German 2, or 3, or two years of high school German.

5. Introduction to the Classics.—Schiller's *Jungfrau von Orleans;* Goethe's *Hermann und Dorothea;* or others of the classics. Prose composition. *I* or *II;* (4). Miss BLAISDELL, Dr. POOR, Dr. WILLIAMS, Dr. KOLLER

Prerequisite: German 4, or three years of high school German.

6. Scientific Prose.—Rapid reading of scientific works. (Parallel with 5. Students may not take both 5 and 6 for more than a total of four hours' credit without special permission of department.) *II;* (4).

Dr. BARTO, Dr. GREEN, Mr. ZUCKER

Prerequisite: German 4, or three years of high school German.

12. Newspaper Reading.—Daily reading of newspapers. Oral and written composition based upon the reading. Conversation. (Parallel with 5 and 6. Not open to students who have had 5 to 6 or any more advanced course.) *II;* (4). Mr. ZUCKER

Prerequisite: German 4 or three years of high school German, and the consent of the instructor.

Third-Year Courses

NOTE.—Not more than ten hours of these courses may be counted towards a major without the approval of the department.

7. Modern Fiction.—(Intended primarily for students who take 5 in the first semester. Not open to those who have had any course more advanced than 5.) *II;* (3). Dr. KOLLER, Dr. GREEN

Prerequisite: German 5, or equivalent.

10. Introductory Goethe Course.—Works illustrating different periods in Goethe's development: *Goetz von Berlichingen; Egmont; Iphigenie auf Tauris;* selections from *Dichtung und Wahrheit. II;* (3).

Assistant Professor MEYER, Assistant Professor BROOKS

Prerequisite: German 14, or 16, or 24, or 28a.

14. Introductory Schiller Course.—Works illustrating different periods in Schiller's development: Lyrics and Ballads; *Kabale und Liebe; Braut von Messina. I;* (3). Assistant Professor BROOKS, Miss BLAISDELL

Prerequisite: German 5, or equivalent.

16. Elementary Prose Composition.—*I* or *II;* (2).

Dr. POOR, Dr. WILLIAMS, Dr. GREEN

Prerequisite: German 5, or equivalent.

17. Intermediate Prose Composition.—*II;* (3).

Assistant Professor BLOOMFIELD, Dr. POOR

Prerequisite: German 16.

24. Modern Drama.—Rapid reading of dramas by Grillparzer, Hebbel, Hauptmann, and others. *I;* (3). Assistant Professor BLOOMFIELD

Prerequisite: German 5, or equivalent.

28a-28b. German Lyrics.—The form, development, and different types of the lyric. The chief lyric poets of the classical period. (Not open to freshmen.) *I, II;* (2). Assistant Professor MEYER

Prerequisite: German 5, or equivalent.

Primarily Fourth-Year Courses

NOTE.—Courses 11, 19, 26, 29, and 31 are especially recommended to all candidates for graduate scholarships in German; the same courses, together with 25, are recommended to seniors who expect to teach German.

8. Schiller.—The life of Schiller; *Wallenstein* and other selections. *II;* (3). Professor LESSING

Prerequisite: Three years of college German, or equivalent.

11. German Literature After the Reformation.—Lectures; recitations; reports on collateral reading. *II;* (3). Professor LESSING

Prerequisite: German 26.

[**19a-19b. Goethe's Faust.**—The Faust legend and early Faust books and plays; the genesis of Goethe's *Faust;* reading of both parts. Not given 1914-15. *I, II;* (2). Professor GOEBEL]

25. Teachers' Course.—Methods; examination of text-books. (Open to seniors and special students who have 20 hours' credit in German.) *II;* (2).

Miss BLAISDELL

Prerequisite: German 29a or equivalent; completion of or registration in Education 1 or equivalent.

26. German Literature to the End of the Reformation.—Lectures, recitations; reports on assigned reading. *I;* (3). Professor LESSING

Prerequisite: German 10, or 24, or 28.

[27. Lessing.—The life of Lessing; *Nathan der Weise; Emilia Galotti,* and other selections. *I;* (3). Not given, 1914-15. Professor LESSING

Prerequisite: Three years of college German, or equivalent.]

29a-29b. Advanced Prose Composition.—Themes on Germany and German life, based on reading, discussed in German. *I, II;* (3). Dr. KOLLER

Prerequisite: German 17.

30a-30b. Thesis Course.—(Intended primarily for candidates for honors in German, but open to other seniors.) *I, II;* *(1 or 2).

Professor GOEBEL and other members of the department

Prerequisite: Senior standing in College, and three years of college German or equivalent.

31. Middle High German.—*I;* (2). Professor GOEBEL.

Prerequisite: Senior or graduate standing; three years of college German.

[32.—History of German Civilization.—Readings; lectures; discussions. Not given 1914-15. *I;* (3). Professor LESSING]

39a-39b. Goethe and Schiller.—Interpretation of Goethe's poems. Goethe's *Tasso;* Schiller's *Ueber naive und sentimentalische Dichtung. I, II;* (2). Professor GOEBEL

Prerequisite: Three years of college German; for the second semester, German 39a or the consent of the instructor.

Courses for Graduates

Students desiring to take German as a major are expected to have completed a four years' course of undergraduate study in German, corresponding to the four year's course at this University. They are expected to be familiar with the principal works of the writers of the classical and modern periods of German literature, to show a general knowledge of the history of German literature, and to be able to follow lectures in the German language.

Of collateral subjects, a reading knowledge of Latin and French is required. It is desirable that candidates for the degree of Ph. D. have some knowledge of Greek. All students are expected to have had a course in German history.

101. Seminar in Germanic Philology.—Training in original research; results of value may be published in the *Journal of English and Germanic Philology. Once a week; I, II; (1 unit).* Professor GOEBEL

[103. Introduction to the Historical Study of the Germanic Languages.—History of German Philology; comparative grammar of the Old Germanic dialects. Lectures; discussions of special topics. Not given, 1914-15. *Twice a week; II; (1 unit).* Professor GOEBEL]

104. Gothic.—Grammar and literature. *Twice a week; I; (1 unit).*

Professor GOEBEL

105. Old High German.—Grammar and interpretation of the oldest literary documents. *Three times a week; II; (1 unit).* Dr. WILLIAMS

*In registering for a course with variable credit hours, a student must put down on his study-list, *not* the possible hours, as shown here, but the number of hours for which *he* intends to take the course; e. g., not *2-5*, but *2*, or *3*, or *4*, or *5*.

109. Goethe's and Schiller's Philosophy.—*Twice a week; I, II; (1 unit).* Professor GOEBEL

110. Early German Drama.—Drama up to the Reformation; medieval religious drama; Shrovetide plays; beginnings of the humanistic drama. *Twice a week; I; (1 unit).* Assistant Professor BROOKS

113. German Literature of the Fifteenth and Sixteenth Centuries.—Luther and the Reformation; Mastersingers and folksong; the Reformation drama; Hans Sachs; Brant; Fischart; the chap books; the English comedians. *Twice a week; II; (1 unit).* Assistant Professor BROOKS

115. History of German Literature from Goethe's Death to the Present Time.—*Twice a week; I, II; (1 unit).* Professor LESSING

[116. Medieval German Literature With Reference to Political, Religious, and Social History.—Research . *Twice a week; I; (1 unit).* Not given 1914-15. Professor LESSING]

[117. History of German Literature During the Eighteenth Century.—*Twice a week; I, II; (1 unit).* Not given, 1914-15. Professor GOEBEL]

118. The German Drama Since Schiller.—Research. *Twice a week; I, II; (1 unit).* Professor LESSING

[119. The German Novel.—Research. *Twice a week; I, II; (1 unit).* Not given, 1914-15. Professor LESSING]

121b. Gudrun.—Lectures and interpretations. *Twice a week; II; (1 unit).* Professor GOEBEL

SUMMER SESSION COURSES

S 1. Beginners' Course.—Gohdes and Buscheks' *Sprach-und Lesebuch.* (4). Dr. KOLLER, Dr. HELD

S 2. Intermediate Course.—(3). Dr. BARTO

S 3. Prose Reading.—Narrative prose; sight translation; composition. (3.) Dr. BARTO

S 4. Readings from the Classics.—Lessing's *Minna von Barnhelm,* Schiller's *Jungfrau von Orleans.* (3). Professor LESSING

S 5. Prose Composition and Conversation.—Translation of ordinary prose into German; idiomatic constructions; free composition and conversation. Pope's *Composition.* (1). Dr. HELD

S 9. Teachers' Course.—Place, aim, and scope of the study of German in the high school; methods; difficulties. Observation work in the beginners' course. (1.) Dr. KOLLER

***S 11. History of German Literature from Klopstock to Keller.**—(2). Professor LESSING

B. SCANDINAVIAN

Undergraduate Courses Not Open to Freshmen

[1a-1b. Elementary Norwegian.—*I, II;* (3). Not given, 1914-15.]

[2. Elementary Swedish.—*I;* (2). Not given, 1914-15.]

3. Advanced Norwegian.—Ibsen; Björnson. Critical Study. *II;* (2). Associate Professor FLOM

Prerequisite: Scadiavian 1a-1b, or equivalent.

4a-4b. Advanced Swedish—*I, II;* (2). Associate Professor Flom

[5. Henrik Ibsen.—*II;* (2). Not given, 1914-15.]

6 Ibsen's Social Dramas.—Lectures; interpretation of four of the social dramas; Ibsen's technique. Archer's translation is used. *II;* (2). Associate Professor Flom

Prerequisite: Junior standing.

12. Norse Mythology.—Primitive religion; the religious belief of the Norseman in pre-christian times; the principal myths; theogony, cosmogony, and the myth of the end of the world. *I;* (2). Associate Professor Flom

Prerequisite: Junior standing.

14. History of Old Norse Literature.—*II*; (2). Associate Professor Flom

30. Scandinavian Drama.—*I;* (1). Associate Professor Flom

Courses for Graduates

Preparation for graduate work in the Scandinavian languages or literature must include a reading knowledge of one of the Scandinavian languages and systematic work in the undergraduate courses in Scandinavian or their equivalent. Any graduate student in language may, however, be admitted to the purely philological courses.

101. Old Norse.—The language as a member of the Germanic group. The *Volsungasaga:* selections from the King's Sagas. *I, II; (1 unit).* Associate Professor Flom

[102. Old Danish.—*Twice a week; I; (1 unit).* Not given, 1914-15. Associate Professor Flom]

110. Advanced Old Norse.— Mythical lays of the *Elder Edda. Twice a week; I; (1 unit).* Associate Professor Flom

GREEK

(See Classics)

HISTORY

Evarts Boutell Greene, Ph.D., *Professor*
Clarence Walworth Alvord, Ph.D., *Professor*
Laurence Marcellus Larson, Ph.D., *Professor*
Albert Howe Lybyer, Ph.D., *Associate Professor*
William Spence Robertson, Ph.D., *Assistant Professor*
Paul Van Brunt Jones, Ph.D., *Associate*
Theodore Calvin Pease, Ph.D., *Associate*
Arthur Charles Cole, Ph.D., *Instructor*
Elizabeth Parnham Brush, A.M., *Assistant*
Jay Earll Miller, A.M., LL.B., *Assistant*
Co-operating:
William Abbott Oldfather, Ph.D., *Associate Professor, Greek*
Howard Vernon Canter, Ph.D., *Assistant Professor, Latin*

SUMMER SESSION ONLY

Thomas Francis Moran, Ph.D., *Purdue University*
Robert Kimball Richardson, Ph.D., *Beloit College*

Of the courses listed below, History 1 (Continental European history) and History 2 (English history), which are intended primarily for freshmen and

sophomores and may not be taken for full credit by seniors, furnish the best general introduction to the advanced courses of the department. History 3 (American history) is especially appropriate for sophomores, and is the ordinary prerequisite for advanced courses in this subject. For those who expect to teach history or classics in secondary schools courses 5 and 6 (Ancient history) will be useful. It is not, however, necessary or desirable that the same student should take all of these introductory courses. The junior and senior years should be given to distinctly advanced courses, especially those listed in group B below. The introductory courses in economics and political science (Economics 1 and Poltical Science 1 and 3) are especially recommended to students in this department. The importance of thorough linguistic training is also emphasized, particularly in Latin, French, and German.

Honors

Candidates for honors, as distinguished from a major, in history must offer:

1. Not less than 24 hours in this subject, including History 1 and 3, at least 3 hours of English history, and at least 6 hours in Group B.

2. Two minor subjects aggregating at least 24 hours, approved by the department, including in each case some advanced work. The minors must be selected from the following list: economics; political science; law; philosophy, including a course in logic and one in the history of philosophy (one course in education or psychology may be accepted as a part of the requirement in philosophy); English literature; the classics. Economics or political science must be offered as one of the minor subjects. The ability to read simple prose in one foreign language is ordinarily expected of candidates in history, and students who have pursued the study of Romance languages or Germanic languages so far as to include courses in the history of literature may count one of these subjects as a minor. The minor subjects above named will, for the present, be accepted as minors for students who are candidates for the ordinary degree of A.B.

Courses for Undergraduates Only

1a-1b. Continental European History.—Europe from the fourth century to the present time. (The work of neither semester may be taken separately without special permission.) *I, II;* (4).

Associate Professor Lybyer, Dr. Jones, and assistants

2a-2b. English History.—First Semester; political history of England to 1602; social, economic, and religious movements. Second Semester; the modern history of England; colonial and imperial development. *I, II;* (3).

Professor Larson, Dr. Cole, and assistants

3a-3b. History of the United States.—First Semester; the Colonial Era; the Revolution; genesis of the Federal Constitution. Second Semester; the United States under the Constitution. (Either semester may be taken separately.) *I, II;* (3).

Professor Greene, Assistant Professor Robertson, Dr. Cole

Prerequisite: One year of college work.

5. History of Greece.—*I;* (3). (See Greek 20.)
Associate Professor OLDFATHER

Prerequisite: One college course in history or the classics. Not open to freshmen.

6. History of Rome.—*II*; (3). (See Latin 19.)
Assistant Professor CANTER

Prerequisite: One college course in history or the classics. Not open to freshmen.

[**17. The History of Illinois.**—The political, economic, and social development of a typical commonwealth in the Middle West, considered in its relation to the general course of American history. *II;* (2). Not given in 1914-15.

Prerequisite: History 3a-3b or junior standing in any college of the University.]

18. The Teaching of History.—Problems of historical teaching in secondary schools. *I;* (2). Dr. COLE

Prerequisite: History 1a-1b, 3a-3b, or their equivalent; senior standing.

28a-28b. Thesis.—For candidates for honors and for other seniors who wish special training in investigation. *I, II;* (2).
Assistant Professor ROBERTSON and other members of the department

Courses for Undergraduates and Graduates

(Open to seniors and to juniors of high standing. The ability to use French and German is desirable in the courses of this group.)

4a-4b. The Constitutional History of England.—First Semester; institutional origins. Second Semester; modern constitutional practise. (Important for students who wish to specialize in history, political science, or law.) *I, II;* (3). Professor LARSON

Prerequisite: One year of college history.

[**7. The Revolutionary and Napoleonic Era.**—*I;* (3). Not given in 1914-15.

Prerequisite: History 1a-1b.]

8. English Civilization in the Middle Ages.—The religious, economic, and intellectual development of medieval society. *I;* (3).
Professor LARSON

Prerequisite: History 1a-1b.

9. European Society in the Era of the Renaissance.—The transition medieval to modern ideals. (Continuation of course 19; either may be taken separately.) *II;* (3). Dr. JONES

Prerequisite: History 1a-1b.

[**10. The Development of American Society in the Eighteenth Century.**—*II;* (4). Not given in 1914-15.

Prerequisite: History 3a-3b.]

[**12. History of Germany.**—*I, II;* (2). Not given in 1914-15.]

14. The Making of the Federal Constitution.—The events from 1783 to 1789 which resulted in the framing and ratification of the Federal Constitution of 1787; the contemporary arguments for and against its ratification. *I;* (3).
Professor GREENE

Prerequisite: History 3a-3b or Political Science 1 and 3.

15. The Civil War and the Reconstruction in the United States.—*II;* (3). Dr. Cole

Prerequisite: History 3a-3b.

16a-16b. The Exploration and Colonization of the West.—First Semester; the Mississippi Valley from the earliest European explorations to the close of the war 1812. Second Semester; the Mississippi Valley since 1815, and the progress of western expansion to the Pacific. (Either semester may be taken separately. *I, II;* (2). Professor Alvord

Prerequisite: History 3a-3b.

19. France in the Feudal and Later Middle Ages With Special Reference to Institutions.—A reading knowledge of the French is required. May be combined with History 8 (English Civilization in the Middle Ages). *I;* (3). Dr. Jones

Prerequisite: History 1a-1b.

20a-20b. Europe From the Period of the Napoleonic Empire to the Present Time.—Political movements and the development of civilization as the historical basis for an understanding of contemporary European life. First Semester; the nineteenth century to the formation of the German Empire in 1871. Second Semester; Europe since 1871. (Either semester may be taken separately.) *I, II;* (3). Associate Professor Lybyer

Prerequisite: One year of college work in history or political science, and junior standing.

21. History of the United States Since the Reconstruction. Introduction to contemporary American politics. *I;* (3).

Assistant Professor Robertson

Prerequisite: History 3a-3b.

26. The Latin-American Colonies.—The political, economic, social, and intellectual life of Spain during the period of discovery; the exploration, settlement, and civilization of Spanish America and the Philippines; the exploration and colonization of Brazil. *I;* (3). Assistant Professor Robertson

Prerequisite: History 1a-1b or 3a-3b.

27. The History of Latin-America From the Wars of Independence to the Present Time.—The leading Latin-American states; political parties; existing governments; relations with Europe and the United States; the Old Regime in Texas, Mexico, and California. *II;* (3).

Assistant Professor Robertson

Prerequisite: History 3a-3b.

29. The Far East.—The contact of Western Christendom with the Far East from the Portuguese establishments of the sixteenth century to the Chinese revolution of 1911, with special reference to China and Japan. *II;* (2). Professor Greene

Prerequisite: Senior standing including at least one year of college work in history, economics, or political science.

Courses for Graduates

A student entering upon graduate work should have had at least the equivalent of the introductory courses in European and American history. All students of history should have a reading knowledge of German and French; for

medieval history some knowledge of Latin is indispensable, and in certain fields of American history Spanish is needed.

Graduate courses in history at the University of Illinois are of three kinds: 1. Instruction in methodology, historiography, and bibliography. This work (in course 103a-103b) is required of all graduate students in history during their first year. 2. Seminar courses for the study of special fields with a view primarily to training in the methods of historical criticism and research. 3. Courses for information and guidance in general reading.

ILLINOIS SURVEY.—Students of history have an opportunity to pursue research in western history in connection with the Illinois Survey, an organization for the purpose of carrying on systematic studies in the history of Illinois.

The History Club, consisting of graduate students and instructors, devotes its programs to reviews of current progress in historical work and informal discussion of historical topics.

101. Seminar in American History.—Bibliography; practise in the solution of typical problems; reports on the progress of individual investigations by instructors and students. *Once a week; I, II.** Professor GREENE and others

Students interested in the investigation of special topics, whether with a view to writing theses or otherwise, may register in this course and will be advised by members of the department as follows:

On American history before 1789 and problems of church and state.
Professor GREENE

On American history after 1789 and Latin-American history.
Assistant Professor ROBERTSON, Dr. COLE

On the history of the West. Professor ALVORD

102. Studies in English History.—*Twice a week; I, II.**
Professor LARSON

103. Historical Bibliography and Criticism.—Problems in various fields. Required of all candidates for an advanced degree in history who do not present evidence of similar training elsewhere. *Twice a week; I, II; (½ unit).*
Associate Professor LYBYER and others

104. Research in European History.—Investigation of topics in medieval and modern history. *I, II.** Associate Professor LYBYER, Dr. JONES

105. The History of Western Expansion, 1763-1818.—Interpretation of Western history. Lectures and readings. *Once a week; I, II; (½ to 1 unit).*
Professor ALVORD

111. Spanish-American Relations.—The relations of the Latin-American states with Europe and the United States. Selected topics. *Once a week; I, II.** Assistant Professor ROBERTSON

112. Studies in American Religious History.—Church and State. *Once or twice a week at the option of the instructor. I, II.**
Professor GREENE

SUMMER SESSION COURSES

S 1c. History of Europe Since 1648.—Introductory course corresponding, for the period covered, to History 1, as given during the regular session. (2½.) Professor RICHARDSON

*The unit values of graduate courses in history are fixed at the time of registration, after conference with the instructors in charge of the courses.

S 3a. American History, 1606-1783.—Colonization; the colonies in the eighteenth century; the conflict of France and England for the possession of North America; the American Revolution. (2½.)

Assistant Professor Robertson

Courses for Graduates and Undergraduates

(At least junior standing required)

*S 4. **The Modern Constitutional History of England.**—(2½).

Professor Moran

Prerequisite: At least one year of college work in European or English history.

*S 30. **The United States and Latin America.**—The liberation of the Spanish-American colonies; the independence of Brazil; their recognition as independent nations; the Monroe Doctrine, its origin, application, and influence; Pan-Americanism; intervention in Spanish America; the Panama Canal. (1½.)

Assistant Professor Robertson

Prerequisite: At least one college course in American history.

*S 31. **Intellectual Background of Medieval Institutions.**—The ancient origins, and nature, of that attitude toward God and the world which forms the intellectual basis for the most characteristic institutions of the Middle Ages. A study, in translation, of Augustine's *City of God* and Dante's *De Monarchia*. The fate of classical literature; one or two types of medieval literature. (2½.)

Professor Richardson

Prerequisite: A college course in medieval history. Open also by permission of the instructor to advanced students in classics and modern languages.

Courses for Graduates

*S 101. **Investigation of Selected Topics.**—Conferences with graduate students who desire guidance in research. Assistant Professor Robertson

HORTICULTURE

Joseph Cullen Blair, M.S., *Professor, Horticulture*
John William Lloyd, M.S., *Professor, Olericulture*
Charles Spencer Crandall, M.S., *Professor, Pomology*
Charles Mulford Robinson, A.M., *Professor, Civic Design*
Herman Bernard Dorner, M.S., *Assistant Professor, Floriculture*
Bethel Stewart Pickett, M.S., *Assistant Professor, Pomology*
Wilhelm Miller, Ph.D., *Assistant Professor, Landscape Horticulture*
Ralph Rodney Root, M.L.A., *Assistant Professor, Landscape Gardening*
Earnest Winfield Bailey, M.S., *Associate, Pomology*
Oscar S Watkins, B.S., *Associate, Horticultural Chemistry*
Charles Elmer Durst, M.S., *Associate, Olericulture*
Simeon James Bole, A.M., *Associate, Pomology*
John Joseph Gardner, M.S., *Associate, Pomology*
Ira Dent Allison, B.S., *Associate, Horticulture*
Frank A Cushing Smith, M.L.A., *Instructor, Landscape Design*

*The unit values of graduate courses in history are fixed at the time of registration, after conference with the instructors in charge of the courses.

Robert William Hoffman, B.S., *Instructor, Landscape Gardening*
Frederick Nobel Evans, M.L.A., *Instructor, Landscape Design*
Arthur Samuel Colby, B.S., *Assistant, Pomology*
Franz August Aust, M.S., *Assistant, Landscape Design*
Hebbert Wardwell Blaney, M.L.A., *Assistant, Landscape Extension*
John Raymond Van Kleek, M.L.D., *Assistant, Landscape Extension*
Howard Dexter Brown, B.S., *Assistant, Olericulture*
August George Hecht, B.S., *Assistant, Floriculture*
Duane Taylor Englis, A.M., *Assistant, Floriculture*
Lee Ellis Miles, A.B., *Assistant, Floriculture*
Edwin Deal, B.S., *Assistant, Landscape Extension*

1a. Elements of Horticulture.—Fruit growing, vegetable gardening, and ornamental planting, with special reference to the farm home. (Required of all freshmen in the general course in Agriculture.) Recitations; practical exercises. *I;* (2).

Professor Lloyd, Assistant Professor Pickett, Mr. Gardner, Mr. Colby

1b. Elements of Horticulture.—A continuation of 1a. (Required of all freshmen in the general course in Agriculture.) *II;* (2).

Professor Lloyd, Assistant Professor Pickett, Mr. Gardner, Mr. Colby

2. Small Fruits and Grapes.—The strawberry, raspberry, blackberry, dewberry, currant, gooseberry, grape. History; extent of cultivation; soil; location; fertilizers; propagation; planting; tillage; pruning; insect enemies; diseases; varieties; harvesting; marketing. Lectures; reference readings. *II;* (2). Mr. Bole

Prerequisite: Horticulture 1a and 1b or their equivalents, Horticulture 5.

3. Vegetable Gardening.—The production and marketing of vegetables. Lectures; reference readings; practical exercises. *II;* (5).

Professor Lloyd, Mr. Durst, Mr. Brown

Prerequisite: Horticulture 1a and 1b or their equivalents.

4. Plant Houses.—Construction, cost, and maintenance; heating; ventilating. *I;* (4). Assistant Professor Dorner

5. Plant Propagation.—Grafts; buds; layers; cuttings; seeds. Lectures; laboratory; quizzes. *II;* (5). Assistant Professor Dorner, Mr. Hecht

6. Nursery Methods.—Nursery management and its relation to horticulture. Lectures; reference readings. *II;* (2).

Assistant Professor Pickett, Mr. Bailey

Prerequisite: Horticulture 5; Entomology 4a-4b.

7. Spraying.—Materials, appliances, and methods employed in combating insects and fungous diseases. Lectures; reference readings; laboratory; field work. *II;* (3). Professor Lloyd, Mr. Watkins

Prerequisite: Horticulture 1a and 1b or their equivalents; Chemistry 1; Entomology 4a-4b.

8. Orcharding.—Pomaceous, drupaceous, and nut fruits; large commercial orchards; harvesting; grading; packing; storing; marketing. *I;* (5).

Professor Crandall, Mr. Bailey, Mr. Bole

Prerequisite: Horticulture 1a and 1b or their equivalents, Horticulture 5; Botany 1; Entomology 4a-4b.

[9. Forestry.—Forest trees; uses; distribution; artificial production; relations of forest and climate; legislation and economy. *II;* (2). Not given 1914-15.

Prerequisite: Botany 1, or an equivalent.]

10a. Landscape Gardening.—Lectures; reference reading; drafting; plant studies; field trips. *I;* (3). Mr. Smith

10b. Landscape Design (Elementary Course).—Landscape design, for farm and city homes, playgrounds, small parks, based on topographic surveys. Six hours drafting. *II;* (3). Assistant Professor Root, Mr. Smith

11. Study of Cultivated Plants.—The relationship and classification of certain economic and ornamental plants of the temperate zone; identification of species; examination of living plants and herbarium specimens. Lectures; assigned readings. *I;* (2). Professor Blair, Professor Crandall

Prerequisite: Botany 4a.

12. Evolution of Horticultural Plants.—History, botanical classification, and geographical distribution of cultivated plants; modification under culture; theoretical causes and observed factors influencing variation, particularly food supply, climate, and cross-fertilization. *I;* (3). Professor Crandall

Prerequisite: Two years of University work, including Horticulture 8 and Botany 4a.

15a. Principles of Plant Growing.—Preparation of soils for greenhouse crops; fertilizers; potting and shifting plants; watering. Lectures; greenhouse work. *II;* (5). Assistant Professor Dorner, Mr. Hecht

Prerequisite: Horticulture 5; Botany 1.

15b. Commercial Crops.—Greenhouse plants and cut flowers for wholesale and retail markets; care and marketing. Lectures; greenhouse work. *I;* (5). Assistant Professor Dorner, Mr. Hecht

Prerequisite: Horticulture 15a.

17. Commercial Fruit Culture.—Practical work in houses and fruit plantations; reference readings; seminar. (For students specializing in horticulture.) *I;* (5). Professor Crandall, Mr. Bailey

Prerequisite: Horticulture 2, 8.

18. Experimental Horticulture.—Methods and difficulties in horticultural investigations; the planning of experiments; recording and interpretation of results. (For advanced students preparing for experiment station work.) *II;* (5). Professor Blair, Assistant Professor Pickett, Mr. Watkins

Prerequisite: Twenty hours work in Horticulture.

19. Amateur Floriculture.—Window gardening; flowers upon the home grounds; containers; potting soils; fertilizers; preparation and planting; propagation and culture of plants suitable for window and garden. *I;* (3).

Assistant Professor Dorner

21a-21b. Landscape Design (First Course).—Principles of composition; lectures on form and arrangement. Small home grounds and gardens of simple form. Types of drafting and presentation in office practise. Nine hours drafting. *I, II;* (4). Mr. Evans

Prerequisite: Architecture 32.

22. Special Investigation and Thesis.—*I* or *II;* (5-10).

23a-23b. Landscape Design (Second Course).—Principles of landscape design applied to topographic plans for urban home grounds and country estates, small parks and playgrounds. Lectures. Eleven hours drafting. *I, II;* (4). Mr. Evans

Prerequisite: Horticulture 21b.

24a. Trees and Shrubs.—Plant material important to landscape gardening; landscape value; adaptability to the soil and situation; use in design. Two lectures; one field trip. *II;* (3). Assistant Professor Root, Mr. Hoffman

24b. Trees and Shrubs.—(Continuation of 24a.) Two lectures; one field trip. *I;* (3). Assistant Professor Root, Mr. Hoffman

Prerequisite: Horticulture 24a.

25a and 25b. Landscape Design (Advanced Course).—The larger problems of landscape work; large country estates, country parks, golf courses, cemeteries, real estate subdivisions, other problems of civic extension. Fifteen hours drafting. *I, II;* (5). Professor Robinson, Mr. Evans

Prerequisite: Horticulture 23b.

26a. Planting Design.—Plans, based on the design problems in courses 10b, 23a, and 23b. One conference and six hours drafting. *II;* (3).
Assistant Professor Root, Mr. Hoffman

Prerequisite: Horticulture 23a, 24b.

26b. Planting Design.—Plans, based on the design problems in course 25. One conference and six hours' drafting. *I;* (3).
Assistant Professor Root, Mr. Hoffman

Prerequisite: Horticulture 26a.

27a. Landscape Practise.—Relation of topographic maps to landscape design; calculation of cut and fill; quantities of material; grading plans and working drawings. One lecture and six hours' drafting. *I;* (3). Mr. Smith

Prerequisite: Civil Engineering 22 or 32; Horticulture 10b.

27b. Landscape Practise.—Construction drawings; drainage, water supply and sewage disposal; specifications and reports; engineering drawings based on the problems in courses 25 and 37. Two lectures and four hours' drafting. *II;* (3). Mr. Smith

Prerequisite: Horticulture 27a.

28. Exotics.—Temporary decorative plants used in landscape gardening. Lectures; planting plans; field trips. *II;* (1)
Assistant Professor Root, Mr. Hoffman

Prerequisite: Horticulture 23b, 24b.

29a. Garden Design.—The garden in its relation to the house; architectural harmony, utilization, topographic conditions, and planting for architectural or horticultural emphasis. Eight hours' drafting and one lecture. *I;* (3). Associate Professor Root

Prerequisite: Architecture 32.

29b. Garden Design.—Public gardens and open spaces; their relation to garden design. Eight hours' drafting; one lecture. *II;* (3).
Assistant Professor Root

Prerequisite: Horticulture 29a.

30. Decorative and Bedding Plants.—Tropical and subtropical plants used in decorative work in the conservatory; tender plants used in outdoor bedding. Lectures; practical greenhouse work. *II;* (5).

Assistant Professor DORNER, Mr. HECHT

Prerequisite: Horticulture 15a.

31. Garden Flowers.—Annuals, herbaceous perennials, bulbs, and shrubs for cut flowers and ornamental plantings. *I;* (3).

Assistant Professor DORNER

Prerequisite: Horticulture 5; Botany 1.

32. Floral Decoration.—Cut flowers and plants in decorative work; arrangement in baskets, designs, and bouquets; table decoration; house decoration. (For floricultural students.) *II;* (4). Assistant Professor DORNER

[**33. Systematic Pomology.**—Description, nomenclature, and classification of native and sub-tropical fruits; critical descriptions and identification; relationships and classifications of varieties. Judging and displaying of fruits, *I;* (2). Not given, 1914-15.

Prerequisite: Horticulture 8.]

34. Vegetables Under Glass.—Vegetable forcing. Lectures; reference readings; laboratory. *I;* (3). Mr. DURST, Mr. BROWN

Prerequisite: Horticulture 3, 15a.

35. Private Conservatory Work.—Types of plants for large conservatories; arrangement; care. *II;* (3). Assistant Professor DORNER

Prerequisite: Horticulture 15a, 4.

36. Development of Landscape Gardening.—History from Egyptian to modern times; survey of literature. Lectures; reference readings; library sketches; reports. *II;* (2). Assistant Professor ROOT

37a. Civic Design.—Town remodeling; remedial problems in town planning. Lectures; field trips; reports; drafting. *I;* (3).

Professor ROBINSON

Prerequisite: Horticulture 23b.

37b. Civic Design.—Town extension; preventive and preservative aspects of town planning. Lectures; reference readings, drafting, and textbook. *II;* (3). Professor ROBINSON

Prerequisite: Horticulture 37a.

38. Field Practise in Landscape Gardening.—Carrying out landscape plans in the field. Lectures; field work; reports. *I* or *II;* (2).

Prerequisite: Horticulture 27a, 26b.

39a-39b. Special Lectures.—Problems in landscape gardening. Required of students taking the professional course. One lecture per week with written reports. *I, II;* (1). Assistant Professor ROOT

Prerequisite: Permission of the instructor in charge.

40a. Trees and Shrubs (Advanced Course).—Laboratory; field and herbarium work; assigned readings; seminar conferences. *I;* (3).

Assistant Professor ROOT, Mr. HOFFMAN

Prerequisite: Horticuture 24b.

40b. Trees and Shrubs (Advanced Course).—Classification and arrangement of plants by leaf color. *II;* (3).

Assistant Professor ROOT, Mr. HOFFMAN

Prerequisite: Horticulture 24b, 26b.

Courses for Graduates

At least two years of collegiate work in horticulture and allied subjects and specific preparation for the chosen topics are required for entrance upon major work in this department.

102. Pomology.—Adaptation, propagation, cultivation, or pruning of small fruits. Conferences. *II; (½ to 1 unit).* Professor Crandall

103. Olericulture.—Structure, cultural requirements, and improvement of vegetables. Conferences. *I, II; (1 to 2 units each semester; a student working part time and extending his study for the master's degree over two years may register ½ to 1 unit for each of the four semesters.)* Professor Lloyd

108. Pomology.—The relationship, adaptation, improvement, propagation, cultivation, pruning, protection, preservation, or marketing of orchard fruits. Conferences. *I, II; (1 to 2 units each semester; a student working part time and extending his study for the master's degree over two years may register for ½ to 1 unit for each of the four semesters.)*

Professor Blair, Professor Crandall

[109. Forestry.—Investigation of forest growths. Not given in 1914-15.]

115. Floriculture.—The horticultural status of various flowering plants, or special problems in the culture of greenhouse plants.

Assistant Professor Dorner

HOUSEHOLD SCIENCE

Isabel Bevier, Ph.M., *Professor and Director*
Nellie Esther Goldthwaite, Ph.D., *Assistant Professor*
Cora Emeline Gray, M.S., *Associate*
Ruth Wheeler, Ph.D., *Associate*
Lurene Seymour, Ph.B., B.S., *Associate*
Maud Edna Parsons, A.B., *Instructor and Director of Lunch Room*
Georgia Elizabeth Fleming, B.S., *Instructor*
Grace Esther Stevens, A.B., *Instructor*
Florence Harrison, B.S., *Instructor*
Anna Waller Williams, A.M., *Instructor*
Greta Gray, B.S., A.M., *Instructor*
Mamie Bunch, A.B., *Instructor*
Margaret B Stanton, A.M., *Instructor*

Food

1. Selection and Preparation of Food.—Nature and use, chemical composition, changes effected by heat, cold, or fermentation; the principles of selection; marketing; manufacture of foods; combinations. *II;* (3).

Miss Stevens, Miss Stanton, Miss Greta Gray

Prerequisite: Entrance credit in Physics; Chemistry 1.

6. Economic Uses of Food.—(Continuation of 1.) The economics of the food question; uses and applications of preservatives. *I;* (3).

Miss Stevens, Miss Stanton, Miss Greta Gray

Prerequisite: Household Science 1.

14. **Problems in the Preparation and Service of Food.**—(Continuation of courses 1 and 6.) Preparation and service of meals for a family; cost and dietetic values; the preparation of food in quantities; individual problems in the manipulation of food materials; demonstrations. *I, II;* (3).

Miss Cora Gray, Miss Williams

Open to: a. Those preparing for lunch-room management. b. Those preparing for extension work. c. In special cases, to those who have completed the major in Household Science.

Prerequisite: Household Science 1, 6; Chemistry 1, 2, 3; junior standing and the consent of the instructor.

5. **Dietetics.**—The principles of diet; the relation of food to health; influence of age, sex, and occupation; the construction of dietaries; dietetic treatment of diseases. Laboratory. *I, II;* (3).

Assistant Professor Goldthwaite

Prerequisite: Household Science 1, 6; Physiology 4; Chemistry 1, 2, 3.

4. **Food and Nutrition.**—Application of the principles of pure science to the physiological, chemical, or bacteriological problems of food and nutrition. Individual investigation. *I;* (5). Assistant Professor Goldthwaite

Prerequisite: Bacteriology 5; Chemistry 1, 2, 3, 13a, 9, 9c, five hours in botany or zoology; Household Science 1, 5, 6.

18a-18b. **Lunch Room Management.**—The movement to feed school children; practise. Open to seniors. *I, II;* (3). Miss Parsons

Prerequisite: Household Science 1, 5, 6 and 14; Economics 1 or 2.

The House

2. **Home Architecture and Sanitation.**—Situation, surroundings, and construction of the house; hygiene of the home; heating, lighting, ventilating, water supply, and drainage. Lectures on house planning and sanitary plumbing, fixtures and internal drainage; exercise in making skeleton plans. *I;* (2).

Note.—Only 1 credit for seniors. Professor Bevier and others

3. **Elementary Home Decoration.**—(Continuation of course 2). Evolution of the house; homes of primitive peoples; theory of color and its application in home decoration; furnishings from a sanitary and artistic standpoint. *II;* (2). Professor Bevier, Miss Fleming, Miss Greta Gray

Prerequisite: Art and Design 12; Household Science 2.

10. **Household Management.**—Expenditure of the income; organization; care of the house and family; home nursing; domestic service problem. Laboratory work in practise apartment. *II;* (2). Miss Cora Gray

Prerequisite: Household Science 1, 2, 6; Economics 1 or 2; junior standing.

Textiles

7. **Textiles.**—Primitive industries; production of fibers used in textile manufacture; cloth judging and weaving. *I, II;* (2). Miss Seymour

Note.—Only 1 credit for seniors.

12. **Household Art and Clothing.**—(Continuation of course 7a-7b). Materials suitable for various uses in home and in clothing; texture, quality,

design in relation to form; color in relation to environment and personality; hygienic properties and cost. *II;* (3). Miss Seymour, Miss Fleming

Prerequisite: Household Science 7; Art and Design 1, 12; 30 hours of university work; proof, by examination or otherwise, of the ability to sew.

17. Problems in the Study of Textiles.—The quality; microscopic and chemical analysis of fabrics; textile industry. Lectures; laboratory. *II;* (3). Miss Seymour

Prerequisite: Household Science 7, 12; Chemistry 1, 2, 3.

Courses for Teachers

11. *Teachers' Course.—Methods of presentation, correlation. Planning courses, and some opportunity for presenting them. (For the prospective supervisor of the subject, or for the teacher in the graded schools.) *II;* (3). Professor Bevier, Miss Harrison, Miss Seymour

Prerequisite: Household Science 1, 2, 3, 5, 6, 7, 12, and 13; laboratory work in sewing, saturday morning; first semester; senior standing.

13. History of Home Economics.—Origin and development; the work in different types of institutions; the planning of courses. *I;* (2). Professor Bevier, Miss Harrison

Prerequisite: Senior standing.

9. Seminar.—Different phases of home economics; individual problems. *II;* (3). Professor Bevier

Prerequisite: Senior standing.

Economics of the Family

15. Economics of the Family Group.—The economic relations of the family as a whole and as individuals. Retail market; sources of income, social and industrial conditions affecting it; child labor; economic position of women. *I;* (3). Miss Cora Gray

Prerequisite: Household Science 3, 6, 10, 12.

16a-16b. Problems in the Economics of the Family Group.—Individual work in the senior seminar in economics. *I, II;* †(2-4). Professor Kinley

Prerequisite: Household Science 15.

Courses for Graduates

Students who wish to do graduate work in household science will find it to their advantage to specialize in either the scientific or the economic phases of the subject. In either case they should be able to offer an equivalent of twenty-four hours of household science given in the University of Illinois, with a minimum of two years of chemistry, including organic chemistry, a year of biological science, and a year of either economics or sociology.

101. Home Economics.—The origin and development of home economics; industrial, educational, and sociological aspects. *Twice a week; I, II; (1 unit).* Professor Bevier

*Students regularly registered in courses 11 may have instruction in millinery, without credit, on Saturday morning from 9:00 to 11:00.

†In registering for a course with variable credit hours, a student must put down on his study-list, *not* the possible hours, as shown here, but the number of hours for which *he* intends to take the course; e. g., not *2-5*, but *2*, or *3*, or *4*, or *5*.

102. Special Investigations.—Application of the principles of bacteriology, chemistry, and physiology to the ordinary processes used in preparation of food; problems in nutrition. *Twice a week; I, II; (2 units).*

Professor Bevier, Assistant Professor Goldthwaite, Dr. Wheeler

SUMMER SESSION COURSES

Foods.—The work offered in foods is of two grades. A. That designed for those who have studied or taught household science and wish to prepare themselves to teach it in high schools. B. Advanced work dealing with the general subject of nutrition.

S 1. Sources and costs of foods; the cooking of various types; planning and service of meals. Bevier and Van Meter's *Selection and Preparation of Food.* Reference work; laboratory. Lecture. (1½.) Miss Williams

S 2. Relative nutritive value of foods; dietetic values; the relation of foods to the human body. (1½.) Miss Williams

Prerequisite: A year's work of college rank with foods; a year of general chemistry; a course in general physiology.

S 3. Lunch Room Management.—History of the movement to feed school children. Practise in lunch room management. (1½.) Miss Parsons

Prerequisite: Work equivalent to a year's training in food principles; practical experience in house management and marketing.

S 4. Clothing.—Textiles used in clothing; cost and care of clothing; use of patterns; drafting; laboratory work in the making of undergarments, a shirtwaist, and a cotton dress. (1). Miss Fleming

S 5. Millinery.—Designing and construction of wire, buckram, and cape net frames; the covering with velvet and straw. (1). Miss Fleming

ITALIAN

(See Romance Languages and Literature.)

JOURNALISM

(See Rhetoric 12, 15, 17, 19, under The English Language and Literature.)

LANDSCAPE GARDENING

(See Horticulture.)

LATIN

(See Classics.)

LAW

Oliver Albert Harker, A.M., LL.D., *Professor, Dean*
Frederick Green, A.M., LL.B., *Professor*
Edward Harris Decker, A.B., LL.B., *Professor*
John Norton Pomeroy, A.M., LL.B., *Professor*
Chester Garfield Vernier, A.B., J.D., *Professor*
William Green Hale, B.S., LL.B., *Professor, Secretary*
Charles Ernest Carpenter, A.M., LL.B., *Assistant Professor*

First Year Courses

NOTE.—In addition to the regular courses, first year students are required to attend one quiz-hour each week.

1a-1b. Contracts.—Williston's *Cases on Contracts,* Vols. I and II. Selected Illinois Cases. *I;* (4) : *II;* (3). Professor DECKER

2a-2b. Torts.—Ames and Smith's *Cases on Torts. I, II;* (3). Professor HALE

37. Introduction to the Study of Law— *I;* (1). Professor DECKER

3. Real Property.—Gray's *Cases on Property,* Vols. I and II, (2nd edition) and Kirchwey's *Readings in Real Property. II;* (3). Assistant Professor CARPENTER

4. Common Law Pleading.—Andrews' *Stephen on Pleading.* Selected Illinois Cases. *II;* (3). Assistant Professor CARPENTER

5. Criminal Law.—Beale's *Cases on Criminal Law,* (2nd edition). *I;* (4). Professor VERNIER

6 Personal Property.—Gray's *Cases on Property,* Vol. I, (2nd edition). *I;* (2). Professor GREEN

7. Domestic Relations.—Woodruff's *Cases on Domestic Relation,* (2nd edition). *II;* (2). Professor VERNIER

Second Year Courses

Required Courses

8. Evidence.—Thayer's *Cases on Evidence,* (2nd edition). *II;* (5). Professor HALE

10. Real Property.—Gray's *Cases on Property,* Vols. II and III, (2nd edition). *I;* (2). Assistant Professor CARPENTER

11. Agency.—Wambaugh's *Cases on Agency. I;* (3). Assistant Professor CARPENTER

12a-12b. Equity.—Ames' *Cases on Equity. I;* (3) ; *II;* (2). Professor POMEROY

18. Wills.—Gray's *Cases on Property,* Vol. IV, (2nd edition). *II;* (2). Professor POMEROY

20. Equity Pleading.— Thompson's *Cases on Equity Pleading.* Selected Illinois Cases. *II;* (2). Professor HARKER

35a-35b. Moot Court.— *I, II;* (1). Professor HARKER

Elective Courses

(Open to Second and Third Year Students.)

9. Sales.—Williston's *Cases on Sales,* (2nd edition). *I,* (3). Professor HALE

13. Damages.—Beale's Cases. *I;* (2). Professor DECKER

14. Carriers.—Green's *Cases on Carriers. I;* (3). Professor GREEN

[**27. Future Interests in Property.**—Gray's *Cases on Property,* Vol. V and part of Vol. VI, (2nd edition). *II;* (3). Given in alternate years; not given in 1914-15.]

[28. Insurance.—Wambaugh's *Cases on Insurance. II;* (2). Given in alternate years; not given in 1914-15.]

29. Conveyancing.—Gray's *Cases on Property,* Vol. III and part of Vol. VI, (2nd edition). *II;* (2). Assistant Professor CARPENTER

30. Public International Law.—Lawrence's *Principles of International Law* and Scott's *Cases on International Law. I;* (3). Professor GARNER

32. Quasi-Contracts.—Woodruff's *Cases on Quasi-Contracts. II;* (2). Professor VERNIER

34. Public Utilities.—Wyman's *Cases on Public Service Companies,* (2nd edition). *II;* (2). Professor GREEN

Third Year Courses

Required Courses

15. Bills and Notes.—Huffcut's *Cases on Bills and Notes* (Colson's edition). *I;* (3). Professor VERNIER

17. Private Corporations.—Canfield and Wormser's *Cases on Private Corporations. II;* (2). Professor GREEN

19. Partnership.—Mechem's *Cases on Partnership* (2nd edition). *I;* (2). Professor HALE

21. Suretyship.—Ames' *Cases on Suretyship. II;* (3). Professor DECKER

22. Constitutional Law.—Hall's *Cases on Constitutional Law. I;* (3). Professor GREEN

36a-36b. Moot Court.—*I, II;* (2). Professor HARKER

31. Conflict of Laws.—Beale's *Shorter Selection of Cases on Conflict of Laws. II;* (2). Professor VERNIER

38. Illinois Procedure.—*I;* (3). Professor HARKER

Elective Courses

(Third year students may also elect any of the second year elective courses not previously taken.)

16. Trusts.—Ames' *Cases on Trusts,* (2nd edition). *II;* (3). Professor VERNIER

23. Mortgages and the Recording Acts.—Wyman's *Cases on Mortgages* and part of Vol. VI of Gray's *Cases on Property,* (2nd edition). *I;* (2). Professor POMEROY

24. Municipal Corporations.—Macy's *Cases on Municipal Corporations. I;* (2). Professor POMEROY

25. Bankruptcy.—Williston's *Cases on Bankruptcy. II;* (2). Professor DECKER

33. Constitutional Law.—Hall's *Cases on Constitutional Law. II;* (2). Professor GREEN

LIBRARY SCIENCE

PHINEAS LAWRENCE WINDSOR, Ph.B., *Director*
FRANCES SIMPSON, M.L., B.L.S., *Assistant Director, Assistant Professor*
FLORENCE RISING CURTIS, A.B., B.L.S., *Associate*

Ernest James Reece, Ph.B., *Instructor*
Ethel Bond, A.B., B.L.S., *Instructor*
Edna Lyman Scott, *Special Lecturer*
Alma Penrose, A.B., *Reviser*

Lecturers from the Staff of the Library

Francis Keese Wynkoop Drury, A.M., B.L.S., *Lecturer, Order Work*
Philip Sanford Goulding, A.B., *Lecturer, Cataloging*
Charles Edward Graves, A.B., *Lecturer, Exchanges*
Emma Felsenthal, Ph.B., B.L.S., *Lecturer, Selection of Books*
Alice Sarah Johnson, A.B., B.L.S., *Lecturer, General Reference*
Emma Reed Jutton, B.L.S., *Lecturer, Loans*
Adah Patton, B.L.S., *Lecturer, Cataloging*
Margaret Hutchins, A.B., B.L.S., *Lecturer, General Reference*
Ola M Wyeth, A.B., B.L.S., *Lecturer*
Mary Torrance, A.B., B.L.S., *Lecturer*
Jennie Adah Craig, A.B., B.L.S., *Lecturer*
Charles Edwin Janvrin, Ph.B., B.L.S., *Lecturer*
Winifred Fehrenkamp, B.L.S., *Lecturer*

SUMMER SESSION ONLY

Effie Power, A.B., *Lecturer*

2a-2b. Reference Work.—Methods of bibliographic research; the use of reference books; practical work in the reference department of the University library. *I, II;* (3). Assistant Professor Simpson

3a-3b. Selection of Books.—Principles of selection for libraries of different types; standard lists, critical periodicals, and other aids; practise in writing book annotations. *I, II;* (2). Miss Felsenthal

4a-4b. Practise Work.—Work in the various departments of the University library. To be taken with Library 2, 16, 17, 18, 19, 20, and 21. *I, II;* (2). Mr. Reece

6a-6b. Subject Bibliography.—Books in special subjects with literature and bibliography. Lectures by professors in the respective departments of the University. *I, II;* (2). Director Windsor, and others

7. History of Libraries.—The foundation, development, and resources of the leading libraries of Europe and the United States. Given in alternate years. *II;* (2). Assistant Professor Simpson

8. Advanced Reference.—Transactions of learned societies; special periodicals and government publications; indexes and other works of value to a large reference department. *I;* (2). Assistant Professor Simpson

Prerequisite: Library 2a-2b.

[**9. History of Books and Printing.**—The early forms of books; the invention and spread of printing; book illustration; book-binding. Given in alternate years. *II;* (2). Not given in 1914-15. Director Windsor]

10a-10b. Practise Work.—A continuation of Library 4, supplemented by one month of work as a member of the staff of an assigned public library. *I, II;* (4). Miss Curtis

12. General Reference.—Classification and arrangement of books in the University library; the card catalogs; the more generally used reference books. (Intended for freshmen and sophomores in the University, not for students in Library School.) *I* or *II,* (2).

Miss Hutchins, Miss Felsenthal, Miss Johnson

13a-13b. Public Documents.—13a. Production and distribution of United States documents; their treatment and use as reference books. 13b. American state and municipal documents; publications of foreign governments. *I, II;* (2) Mr. Reece

15a-15b. Seminar in Library Economy.—Special problems; library economy publications. *I, II;* (2). Mr. Reece and others

16. Order, Accession, and Shelf Work.—Order department records and routine; book-buying; publishers and discounts; copyright; serials and continuations; gifts; exchanges; duplicates; the accession book and its substitutes; the shelf list and its uses; the care of pamphlets, clippings, and maps. *I;* (2).

Miss Curtis

17. Classification.—Principles; the Dewey Decimal Classification; the Cutter Expansion Classification; book numbers. *I;* (3). Miss Bond

18. Cataloging.—Dictionary cataloging; subject headings; classed cataloging. *I;* (3). Miss Bond

19. Trade Bibliography.—Books and periodicals used as tools of the book trade of America, England, Germany, and France. *II;* (1). Mr. Reece

20. Loan Department.—Records; representative systems; rules, regulations, and practises. *II;* (1). Miss Jutton

21. Printing, Binding, and Indexing.—*Printing:* Printing for libraries; preparing copy and reading proof. *Binding:* Materials and methods of bookbinding for libraries; practise in preparing books for the bindery and in making necessary records. *Indexing:* Indexes; the form of citation; the choice and arrangements of headings; kind of type. *II;* (2).

Director Windsor, Miss Curtis

22. Library Extension.—Methods; library associations; library schools; library commissions; township and county library systems; traveling libraries; home libraries; other agencies. *II;* (3). Miss Curtis

23a-23b. Library Administration and Current Library Literature.—Current library periodicals, bulletins, reports, catalogs, and reading lists; the organization, reorganization, and administration of small libraries; the planning and equipment of reading rooms and small library buildings; library accounts and business forms. *I, II;* (1). Miss Curtis

24a-24b. Selection of Books.—English translation of representative works of French, German, Spanish, Italian, and Russian novelists of the 19th century; examination of about forty newly published books. *I, II;* (2).

Assistant Librarian Drury

25. Advanced Classification and Cataloging.—The principal systems; rules for cataloging. *II;* (1). Miss Bond

Prerequisite: Library 17, 18.

26a-26b. Library Administration.—Advanced order work; library organization; library architecture; legislative and municipal reference work; library work with children; special topics. *I, II;* (3).
Assistant Professor SIMPSON and others

27. Bibliographical Institutions.—Organization and work of societies and institutions of America and Europe; co-operative bibliographical undertakings; international bibliography. *I;* (1). Miss PATTON

28. Practise Work.—Advanced practise work in certain departments of the University library. *II;* *(1 to 4). Miss CURTIS

SUMMER SESSION COURSES

NOTE—The courses indicated covered six weeks and received no university credit. Only people employed in libraries were admitted.

S 1. Classification; Cataloging; Book Numbers.—*Five times a week.*

S 2. Reference Work.—Reference books suited to the small public library. *Twice a week.*

S 3. Selection of Books.—Book selection and subject bibliography. *Twice a week.*

S 4. Work With Children.—Selection and discussion of children's books; administration of children's libraries; classification and cataloging. *Twice a week.*

S 5. Order and Accession; Loan Department; Binding and Repair. *Twice a week.*

S 6. Library Administration and Extension.—*Twice a week.*

MANUAL TRAINING

SUMMER SESSION ONLY

JOSEPH C PARK, *Director of Industrial Education, Oswego, New York*
GUSTAVE ADOLPH GROSS, *Instructor, Woodworking*
HARVEY HERBERT JORDAN, B.S., *Instructor, General Engineering Drawing*
GUSTAV HOWARD RADEBAUGH, *Instructor, Machine Work*

The courses in Manual Arts have been arranged to satisfy the needs of three classes of students who attend the Summer Sessions; first, superintendents, principals, and teachers in small schools who pursue the work with the idea of either teaching or supervising it in their schools; second, manual arts teachers and supervisors who take the courses to increase their knowledge and experience, thus enabling them to command higher salaries; and, third, to satisfy those students in others courses who take the work to enrich their experience.

S 1. Industrial Education.—History and theory of industrial education; a study of typical schools and systems of manual arts, leading to a better underderstanding of the aims and methods of various schemes for the promotion of industrial education in this country and European countries; organization of work, and a study of equipments and materials. (2½). Mr. PARK

S 2. Woodworking.—(A course for teachers in the 7th and 8th grades and high schools.) Tools—uses, names of parts, adjustments, care of, and sharpening; joints in wood construction and their application; arts and crafts furniture; notebook work, talks, papers, problems, etc.; work at the bench. (3).
Mr. PARK, Mr. GROSS

*In registering for a course with variable credit hours, a student must put down on his study-list, *not* the possible hours, as shown here but the number of hours for which *he* intends to take the course: e. g., not *2-5*, but *2*, or *3*, or *4*, or *5*.

S 3. Woodworking.—(A course for teachers who have completed S 2). Cabinet and furniture making; design; technology; wood turning. (3). Mr. Park, Mr. Gross

S 4. Elements of Drafting.—Required of engineering students; free-hand and mechanical lettering; use of instruments on standard set of working drawing plates; tracing, machine sketching, isometric and oblique projection, and perspective. Miller's *Mechanical Drafting.* (4). Mr. Jordan

S 5. Descriptive Geometry.—Point, line, and plane; the properties of surfaces; intersections and developments of surfaces. Miller's *Descriptive Geometry.* (4). Mr. Jordan

S 6. Pattern Shop.—The care and use of tools; the construction of patterns, core-boxes, and the use of machines in modern pattern shops. (3). Mr. Gross

S 7. Machine-Shop.—Chipping and filing; lathe, drill press, shaper, planer, and grinding machine. (2½). Mr. Radebaugh

S 8. Advanced Machine-Shop.—Milling machine, screw machine, gear cutter, boring mill, and turret lathe; erecting and testing of machines and gas engines. (2½). Mr. Radebaugh

MATHEMATICS

Edgar Jerome Townsend, Ph.D., *Professor*
Samuel Walker Shattuck, C.E., LL.D., *Professor, Emeritus*
George Abram Miller, Ph.D., *Professor*
Henry Lewis Rietz, Ph.D., *Professor*
Charles Hirschel Sisam, Ph.D., *Assistant Professor*
James Byrnie Shaw, D.Sc., *Assistant Professor*
Arnold Emch, Ph.D., *Assistant Professor*
Arthur Robert Crathorne, Ph.D., *Associate*
Robert Lacy Borger, Ph.D., *Associate*
Ernest Barnes Lytle, Ph.D., *Associate*
Gustaf Eric Wahlin, Ph.D., *Associate*
Aubrey John Kempner, Ph.D., *Instructor*
William Wells Denton, Ph.D., *Instructor*
Edward Wilson Chittenden, Ph.D., *Instructor*
Josephine Elizabeth Burns, Ph.D., *Instructor*
Clarence Mark Hebbert, B.S., *Assistant*
Guy Watson Smith, M.S., *Assistant*
Henry Charles Zeis, A.B., *Assistant*
William Harold Wilson, A.M., *Assistant*
Robert H Marshall, A.B., *Assistant*
Nathan Cessna Grimes, A.M., *Assistant*

SUMMER SESSION ONLY

Sidney Archie Rowland, A.B., *Assistant*
George Rutledge, A.B., *Research Assistant*

Students who select mathematics as a major subject for a bachelor's degree must take Mathematics 7, 9, and twelve hours chosen either from the courses in mathematics open to undergraduates (not including Mathematics 2, 4, 6, and 8), or from courses open to graduates and undergraduates.

A minor of twenty hours must be selected from the courses offered in astronomy, physics, and chemistry.

2. College Algebra.—*I* or *II;* (3).

Dr. Lytle and other members of the department

Prerequisite: Entrance algebra, 1½ units; plane geometry, 1 unit.

4. Plane Trigonometry.—*I* or *II;* (2).

Dr. Lytle and other members of the department

Prerequisite: Entrance algebra, 1½ units; plane geometry, 1 unit.

5. Teachers' Course.—Secondary algebra and geometry educational value; position in course; methods of teaching; correlation; comparison of American methods with those of foreign countries; order of topics; most important topics; text-books; literature. Lectures; discussions; reports. *I;* (2).

Dr. Lytle

Prerequisite: Junior standing in mathematics.

6. Analytic Geometry.—Plane and solid analytic geometry. *II;* (5).

Professor Miller and other members of the department

Prerequisite: Mathematics 2, 4.

7-9. Differential and Integral Calculus.—The principles of the differential and integral calculus developed and applied to functions of one and of several variables. (Section A is an honor section and may be selected by those specializing in mathematics or having an average grade of 90 in freshman mathematics.) *I;* (5); *II;* (3).

Note.—Two sections of Mathematics 7 are given the second semester.

Professor Rietz and other members of the department

Prerequisite: Mathematics 6.

8. Differential and Integral Calculus.—A brief course in calculus for students in chemistry and chemical engineering. *I;* (5).

Professor Miller, Mr. Smith

Prerequisite: Mathematics 6.

9a. Differential and Integral Calculus (Second Course).—The definite (single and multiple) integral with exercises in the formulation of problems arising in applied mathematics; line, surface, and volume integrals; the theorem of Stokes and Green; partial differentiation; exact differentials with applications of the conditions for exactness; elements of differential questions, approximate quadrature and integration of differential equations. *I;* (2).

Assistant Professor Shaw and members of the department

Prerequisite: Mathematics 7, 9.

10. Theory of Equations and Determinants.—Fundamental properties of an algebraic equation in one unknown; the solutions of systems of simultaneous equations; theory of a system of linear equations; some fundamental properties of determinants. *II;* (3). Professor Miller

Prerequisite: Mathematics 6, 7, 9 (or 8).

16-17. Differential Equations and Advanced Calculus.—Ordinary and partial differential equations supplemented by the consideration of special topics of calculus not ordinarily included in a first course, particularly those of value in the applications of mathematics. *I, II;* (3). Professor Townsend

Prerequisite: Mathematics 7 and 9, (or 8).

18. Constructive Geometry.—Space perception; properties of lines, planes, and the simpler surfaces of the second order studied by methods of

parallel and central projection; graphical interpretation of the processes of analytic geometry; analytic discussion of the methods of descriptive geometry. *I;* (3). Assistant Professor EMCH

Prerequisite: Mathematics 6.

19. Solid Analytic Geometry.—Equations of the plane and right line in space; the more general properties of surfaces of the second degree; the classification and special properties of quadrics; a brief introduction to the theory of surfaces in general. *II;* (3). Assistant Professor SISAM

Prerequisite: Mathematics 7, 9 (or 8), and 10.

21. Method of Least Squares.—Law of probability and error; adjustment of observations; precision of observation; independent and conditional observations. *I;* (2). Professor STEBBINS

Prerequisite: Mathematics 7, 9 (or 8).

23. Averages and the Mathematics of Investment.—Meaning, use and abuse of different kinds of averages; relation of the theory of probability to averages; application of the elements of probability to annuities, insurance, and various branches of science; loans and investments; practical problems in the evaluation of investment securities. *II;* (3). Professor RIETZ

Prerequisite: Mathematics 2; junior standing.

24-25. Functions of a Complex Variable.—*I, II;* (3). Professor TOWNSEND

Prerequisite: Mathematics 7, 9, 16-17.

27-28. Projective Geometry.—Fundamental concepts; anharmonic ratio; projective pencils and ranges; projective transformations and groups; theory of conics and quadric surfaces; pencils and ranges of conics; quadratic transformations and projective theory of cubics; applications in mechanics. *I, II;* (3). Assistant Professor EMCH

Prerequisite: Senior standing in mathematics.

31. Actuarial Theory.—Application of probability to life contingencies; mortality tables; fire insurance; premiums for various types of insurance. *I;* (3). Professor RIETZ

Prerequisite: Mathematics 7, 9 (or 8), and 23.

32. History of Mathematics.—Historical development of the elementary subjects; rise and growth of the higher mathematics chiefly in the nineteenth century; biography of the persons most influential in this development. Lectures; reports on assigned reading. *II;* (2). Dr. LYTLE

Prerequisite: Junior standing in mathematics.

33-34. Modern Algebra.—Theory of matrices; system of linear equations; bilinear and quadratic forms; properties of polynominals; algebraic invariants; elementary divisors. *I, II;* (3). Dr. BÖRGER

Prerequisite: Mathematics 7, 9, 10.

[**40. Fundamental Concepts of Mathematics.**—The general concepts of higher mathematics in their bearing on elementary mathematics. *II;* (2). Not given in 1914-15. Dr. LYTLE

Prerequisite: Junior standing in mathematics.]

Courses for Graduates

100. Seminar and Thesis.—*Three times a week; I, II; (1 or 2 units).*

[**101. Functions of Real Variables.**—The theory of functions of real variables; the theory of assemblages. *Three times a week; I, II; (1 unit).* Not given in 1914-15. Professor Townsend

Prerequisite: Mathematics 16.]

[**104. Expansions in Fundamental Functions.**—Theory of integral equations; methods of expansion of arbitrary functions in terms of the characteristic functions of a given nucleus; applications of Green's functions, Potential functions, Fourier series, series of Legendrians, of Bessel functions, and others; differential equations of physics under given boundary conditions; the inversion of definite integrals. *Three times a week, I, II; (1 unit).* Not given, 1914-15. Assisant Professor Shaw]

105. Calculus of Variations.—Elements of the science most needed in mathematical astronomy and physics. *I, II; (1 unit).* Dr. Crathorne

Prerequisite: Mathematics 16.

[**110. Elliptic Functions.**—Application to geometry and mechanics; the elliptic modular functions. *Three times a week; I, II; (1 unit).* Not given, 1914-15. Assistant Professor Emch

Prerequisite: Mathematics 24.]

[**111. Automorphic Functions.**—*First semester:* The group-theoretic side of the theory. *Second semester:* Function-theoretic developments and applications. *Three times a week; I, II; (1 unit).* Not given in 1914-15. Assistant Professor Emch

Prerequisite: Mathematics 24 and preferably 27 and 110.]

[**113. Theory of Linear Differential Equations.**— *Three times a week; I, II; (1 unit).* Not given in 1914-15. Dr. Crathorne

Prerequisite: Mathematics 24.]

120. Elementary Theory of Groups.—Groups in arithmetic, geometry, and trigonometry; those which can be represented with a small number of letters; the abstract group theory; the Galois theory of equations. *Three times a week; I, II; (1 unit).* Professor Miller

[**121. Theory of Groups.**—*Three times a week; I, II (1 unit).* Not given in 1914-15. Professor Miller

Prerequisite: Mathematics 120.]

[**124. Theory of Numbers.**—Conferences; Kronecker's modular systems; quadratic residues; quadratic forms; algebraic numbers. *Three times a week; I, II; (1 unit).* Not given in 1914-15. Dr. Wahlin]

[**129. Theory of Statistics.**—Statistical investigation; application of the theory of probability to statistical data; fitting curves to observation; interpolation; theory of errors; mathematical theory of variability and correlation; application of principles developed to problems in economics, sociology, and biology. *Three times a week; I, II; (1 unit).* Not given in 1914-15. Professor Rietz

Prerequisite: Mathematics 8.]

[**130. Invariants and Higher Plane Curves.**—Algebraic curves; application of the theory of invariants to higher plane curves; curves of the third and fourth order. *Three times a week; I, II; (1 unit).* Not given in 1914-15. Assistant Professor Sisam

Prerequisite: Mathematics 16, 27.]

131. Algebraic Surfaces.—Application of homogeneous co-ordinates and the theory of invariants to geometry of three dimensions; general theory of surfaces; special properties of surfaces of the third and fourth order. *Three times a week; I, II; (1 unit).* Assistant Professor SISAM

Prerequisite: Mathematics 19.

[**135. Metric Differential Geometry.**—Applications of the calculus to the general theory of curves and surfaces based primarily on the use of Cartesian co-ordinates; relation of the theory of surfaces to the theory of invariants of a pair of quadratic differential forms. *Three times a week; I, II; (1 unit.)* Not given, 1914-15. Assistant Professor SISAM

Prerequisite: Mathematics 16.]

141. Vector Methods.—The algebras of quaternions, space analysis, and dyadics, development of theorems of differentiation and integration, applications to rational mechanics, elasticity, hydrodynamics, electrodynamics. *Three times a week; I, II; (1 unit).* Assistant Professor SHAW

Prerequisite: Mathematics 16.

142. General Algebra.—Theory of linear associative algebra or hypercomplex numbers, with particular study of the systems useful for the geometry and physics of N dimensions. Applications to relativity theories, and to general differential and integral invariants. Theory of linear operators and functional equations; applications to general analysis, integro-differential equations, infinite systems. General theory of operators; applications to general invariant theories. *Three times a week; I, II; (1 unit).*

Assistant Professor SHAW

SUMMER SESSION COURSES

S 2. College Algebra.—(Equivalent to the regular university course.) Rietz and Crathorne's *College Algebra.* (3). Dr. WAHLIN

Prerequisite: 2½ units entrance mathematics.

S 4. Plane Trigonometry.—(Equivalent to Mathematics 4.) Kenyon and Ingold's *Trigonometry.* (2). Dr. LYTLE

Prerequisite: 2½ units entrance mathematics.

S 6. Analytical Geometry.—(Equivalent to Mathematics 6.) An introductory course in plane and solid analytic geometry. Ziwet and Hopkins' *Analytic Geometry.* (5). Dr. KEMPNER

Prerequisite: Mathematics 2 and 4.

S 7. Differential Calculus.—(Equivalent to Mathematics 7). Course in beginning calculus. Townsend and Goodenough's *Essentials of Calculus.* (5). Mr. RUTLEDGE

Prerequisite: Mathematics 6.

S 9. Integral Calculus.—(Equivalent to Mathematics 9). Townsend and Goodenough's *Essentials of Calculus.* (3). Mr. ROWLAND

Prerequisite: Mathematics 7.

S 5. Teachers' Course.—(Equivalent to Mathematics 5). Secondary algebra and geometry; their educational values; position in course; methods of teaching; correlation; comparison of American methods with those of foreign countries; order of topics; most important topics; text-books; literature. Lectures, discussions, reports. (2). Dr. LYTLE

***S 33. Modern Algebra.**—Theory of matrices; systems of linear equations; bilinear and quadratic forms; properties of polynominals; algebraic invariants; elementary divisors. Bôcher's *Introduction to Higher Algebra.* (3).
Dr. WAHLIN

Prerequisite: Mathematics 9, 10.

MECHANICAL ENGINEERING

CHARLES RUSS RICHARDS, M.M.E., *Professor*
GEORGE ALFRED GOODENOUGH, M.E., *Professor, Thermodynamics*
BRUCE WILLET BENEDICT, B.S., *Director, Shop Laboratories*
LEWIS ALLEN HARDING, M.E., *Professor, Experimental Mechanical Engineering*
OSCAR ADOLPH LEUTWILER, M.E., *Assistant Professor, Machine Design*
ARTHUR CUTTS WILLARD, B.S., *Assistant Professor, Heating and Ventilation*
JOHN ADLUM DENT, M.E., *Associate*
GEORGE BENJAMIN RICE, *Lecturer on the Installation and Operation of Mechanical Equipment for Buildings, and Assistant Mechanical Engineer in the Office of the Supervising Architect*
HARRY FREDERICK GODEKE, B.S., *Instructor*
EDWIN FRANK, B.S., *Instructor*
ARTHUR BOQUER DOMONOSKE, M.S., *Instructor, Machine Design*
HARRY WILLIAM WATERFALL, B.S., *Instructor, Machine Design*
FREDERICK CALKINS TORRANCE, M.E., *Instructor*
HORATIO SPRAGUE MCDEWELL, M.M.E., *Instructor*
ALONZO PLUMSTED KRATZ, M. S., *First Assistant, Engineering Experiment Station*
EDGAR THOMAS LANHAM, *Instructor, Forge Practise*
ROBERT EDWIN KENNEDY, *Instructor, Foundry Practise*
GUSTAVE ADOLPH GROSS, *Instructor, Pattern Making*
GUSTAV HOWARD RADEBAUGH, *Instructor, Machine Practise*
JAMES HARVEY HOGUE, *Instructor, Foundry Practise*
LEROY ALONZO WILSON, M.M.E., *Assistant, Engineering Experiment Station*
JAMES MERION DUNCAN, *Assistant, Pattern Making*
PETER JOSEPH REBMAN, *Assistant, Forge Practise*
JOHN ALEXANDER FRISK, *Assistant and Mechanician*

1. Steam and Air Machinery.—The construction, operation, and care of boilers, engines, and air compressors; elementary thermodynamics; steam engine performance; transmission of compressed air and its applications. (For students in civil and mining engineering.) *I;* (3). Mr. DENT, Mr. MCDEWELL

Prerequisite: Junior standing.

2. Steam Engineering.—Engines, boilers, pumps, condensers, and other steam machinery. *II;* (3). Mr. DENT, Mr. GODEKE, Mr. WATERFALL

Prerequisite: Physics 1a-1b, 3a-3b.

4. Elements of Machine Design.—Design of machine elements: bolts keys, journals, bearings, couplings; forms of gear teeth; spur and bevel gears. *I;* (2). Mr. DOMONOSKE, Mr. WATERFALL

Prerequisite: General Engineering Drawing 1, 2.

6a. Heat Engines.—Flow of fluids; steam turbine air compressors and refrigerating machinery. *I;* (3). Professor GOODENOUGH

Prerequisite: Mechanical Engineering 12.

6b. Gas Engines.— Types of gas engines; mixtures of gases; combustion of gaseous fuels; gas producers. *II;* (2). Professor RICHARDS

Prerequisite: Mechanical Engineering 6a.

8. Mechanics of Machinery.—Friction in machine parts; useful application of friction as in friction clutches and brakes; transmission of power by ropes and belting; brakes, clutches, and dynamometers; hoisting machinery; hoisting in mines; elevators and cranes. *I;* (3).

Assistant Professor LEUTWILER

Prerequisite: Theoretical and Applied Mechanics 29, 27; Mechanical Engineering 30, 12.

9. Machine Design.—Theory of machine design, with application; investigation of actual machines similar to the one to be designed; design of machinery subjected to heavy and variable stresses; punches, shears, presses, riveters, and cranes. *I;* (3).

Assistant Professor LEUTWILER, Mr. DOMONOSKE, Mr. WATERFALL

Prerequisite: Theoretical and Applied Mechanics 21, 29; Mechanical Engineering 4, 30.

12. Thermodynamics.—The transformation of heat into work; the second law and its connection with irreversible processes; the properties of heat media; the perfect gases; saturated and superheated vapors; the flow of fluids. *II;* (5). Professor GOODENOUGH

Prerequisite: Mathematics 9a; Theoretical and Applied Mechanics 27.

13. Mechanical Engineering Laboratory.—The testing and calibration of instruments and apparatus; use of the indicator; calculation of horse-power and steam consumption; reading of indicator diagrams; valve setting. (For students in electrical engineering.) *II;* (3). Professor HARDING and others

Prerequisite: Mechanical Engineering 1.

15. Thermodynamics and Heat Engines.—(For students in electrical engineering.) *I;* (5). Mr. DENT, Mr. MCDEWELL

Prerequisite: Mechanical Engineering 1 or 2.

19. Seminar.—Papers on subjects relating to current engineering practise; the indexing of current engineering literature. Open to seniors only. *I;* (1). Professor HARDING

25. Heating and Ventilation for Architects.—The theory and the application of the principles of heating and ventilation to modern practise. Direct and indirect steam and hot water heating; furnace heating; ventilation and air analysis; air condition; temperature and humidity control. *I;* (2).

Assistant Professor WILLARD

Prerequisite: Senior standing.

26. Heating and Ventilation.—The theory and the application of the principles of heating and ventilation to modern practise. Steam boilers and water heaters of steel and cast iron for heating service; heat losses from buildings; direct and indirect steam and hot water heating, using gravity systems; furnace heating; fan blast or mechanical indirect systems; exhaust steam heating; district heating by steam and water; ventilation and air analysis; air conditioning; temperature and humidity control. *I* or *II;* (3).

Assistant Professor WILLARD, Mr. TORRANCE

Prerequisite: Senior standing.

30. Mechanics of Machinery.—Mechanisms and mechanical movements; cams, gears, valve gears, and quick-return motions: graphical constructions for displacement, velocity, and acceleration; kinetics of the steam engine mechanism and similar mechanisms; balancing; critical speeds; force and mass reduction. *II;* (5). Mr. DENT

Prerequisite: Theoretical and Applied Mechanics 27.

36. Industrial Plant Design.—Design and equipment of industrial plants. Design of buildings, heating, ventilation, lighting, power generation, and transmission; drying processes, etc. *II;* (3). Professor HARDING

Prerequisite: Mechanical Engineering 9.

[**37. Science of Management.**—Industrial development; modern industrial tendencies; principles of organization; selection and compensation of labor; application of science to industrial problems; practical shop systems of management; production. *I;* (3). Not given, 1914-15. Director BENEDICT

Prerequisite: Mechanical Engineering 81, 82.]

52. Power Plant Design.—Study and design of some form of steam power plant. *II;* (3).

Assistant Professor LEUTWILER, Mr. GODEKE, Mr. DOMONOSKE

Prerequisite: Mechanical Engineering 9 and 65.

64. Power Measurement.—Apparatus for engine and boiler tests—scales, thermometers, indicators, brakes and dynamometers, gauges, calorimeters; methods of calibrating and using such apparatus; tests for horse-power of steam engines, pumps, and gas engines. Reports. *II;* (3).

Professor HARDING, Mr. GODEKE, Mr. TORRANCE, Mr. MCDEWELL, Mr. FRANK

Prerequisite: Mechanical Engineering 2; Mathematics 9.

65. Mechanical Engineering Laboratory.—Experiments on engines, turbines, gas engines, pumps, boilers, injectors, air compressors, hoisting appliances, heating apparatus, and the refrigerating machines. *I;* (3).

Professor HARDING and others

Prerequisite: Mechanical Engineering 64, 12.

66. Advanced Laboratory Practise.—Special research work in the mechanical engineering laboratory. Open to seniors only. *II;* (2).

Professor HARDING

Prerequisite: Mechanical Engineering 65.

67. Heating and Ventilating Laboratory.—Calibration of instruments; performance and efficiency tests of radiators, heating boilers, heat and vent flues, centrifugal fans, and air washer; heat transmission tests of building materials; tests to determine pressure drop in pipe lines for air and water. *I;* (1).

Assistant Professor WILLARD

Prerequisite: Senior standing.

71. Forge Work for Agricultural Students.—Forging and welding; tempering tools; pointing and hardening cultivator shovels, plow shares. *Six hours a week, either half of I or II;* (1). Mr. LANHAM, Mr. REBMAN

73. Wood Work for Agricultural Students.—Carpentry for the farmer; use of tools; layout and construction of building joints; repairs to buildings and equipment. *Six hours a week, either half of I or II;* (1).

Mr. GROSS, Mr. DUNCAN

75. **Forge Work.**—(9 weeks.) Hand and power forging and welding of metals; heat treatment of carbon and high speed steels in modern, gas, electric, and cyanide furnaces; case carbonizing. *I* or *II;* (1).

Mr. Lanham, Mr. Rebman

77. **Foundry Work.**—(9 weeks.) Modern foundry practise; bench, floor, and machine moulding; all branches of core making; operation of cupola and brass furnace; casting of iron, brass, and alloys. *I* or *II;* (2).

Mr. Kennedy, Mr. Hogue

79. **Pattern Work.**—(18 weeks.) Hand and machine methods in the production of useful patterns. *I* or *II;* (3). Mr. Gross, Mr. Duncan

81. **Machine Work.**—Modern manufacturing methods; machine operation; shop management; organization; production methods; dispatching work; ordering, storing, and routing materials; time studies; shop accounting; inspection and all activities of the machine department of a manufacturing plant. *I;* (3). Director Benedict, Mr. Radebaugh

82. **Machine Work.**—(Continuation of 81.) *II;* (2).

Director Benedict, Mr. Radebaugh

99. **Thesis.**—Investigation of special subject and preparation of thesis embodying a review of the literature of the subject, the results of investigation, and a discussion of those results. *II;* (3).

Professor Richards, Professor Goodenough, Director Benedict, Professor Harding and others

Courses for Graduates

Entrance upon graduate work in mechanical engineering presupposes the full undergraduate course in that subject.

106. **Heat Motors.**—The internal combustion motor; steam turbine. Principles and methods of refrigeration. *Twice a week; (1 unit).*

Professor Goodenough

107. **Thermodynamics.**—Thermodynamics; their application to the solution of physical and engineering problems. *Twice a week; I; (1 unit).*

Professor Goodenough

109. **Machine Design.**—Rational design; the application of mechanics of materials. Individual problems. *Twice a week; I* or *II; (1 unit).*

Assistant Professor Leutwiler

112. **Laboratory Investigation.**—Combustion of fuel; boiler economy; steam engines and turbines; gas engines and producers; properties of explosive mixtures; mechanical refrigeration. Original work. *Three times a week; I, II; (1½ units).* Professor Richards, Professor Harding

114. **Dynamics of Machinery.**—Advanced problems. Balancing; whirling and vibration of shafts; theory of governors; fly wheels; force and mass reduction; stresses in rotating masses. *Twice a week; I, II; (1 unit).*

Professor Goodenough

SUMMER SESSION COURSES

S 1. **Pattern Shop Practise.**—The production of patterns by modern methods applied to use of hand and machine tools. (3). Mr. Gross

S 3. Machine Shop Practise.—Modern manufacturing methods; machine operation, shop management, organization, production methods, dispatching work, ordering, storing and routing materials, time studies, shop accounting, inspection and all activities of the machine department of a manufacturing plant. (3). Mr. RADEBAUGH

MECHANICS, THEORETICAL AND APPLIED

ARTHUR NEWELL TALBOT, C.E., *Professor, Municipal and Sanitary Engineering; in charge of Theoretical and Applied Mechanics*
HERBERT FISHER MOORE, M.M.E., *Professor*
MELVIN LORENIUS ENGER, C.E., *Assistant Professor*
VIRGIL R FLEMING, B.S., *Associate*
CLARENCE EUGENE NOERENBERG, A.B., A.E., *Instructor*
FRED B SEELY, B.S., *Instructor*
GEORGE PAUL BOOMSLITER, M.S., *Instructor*
NEWTON EDWARD ENSIGN, A.B., B.S., *Instructor*
HARRY GARDNER, M.S., *Instructor*
ALEX VALLANCE, M.E., *Instructor*
WILLIAM JAMES PUTNAM, B.S., *Instructor*

SUMMER SESSION ONLY

HARRISON FREDERICK GONNERMAN, M.S., *Instructor*

10. Hydraulics.—The pressure and flow of water; its utilization as motive power; observation and measurement of pressure, velocity, and flow; power and efficiency; determination of experimental coefficients. Hoskins' *Hydraulics. Laboratory weekly; II;* (3). Professor MOORE and others

Prerequisite: Mathematics 9; Theoretical and Applied Mechanics 21.

14. Elements of Mechanics.—Kinematics, kinetics, and statics. (For architects and others who have not taken the calculus.) Morley's *Mechanics for Engineers, II;* (4). Mr. BOOMSLITER, Mr. GARDNER

Prerequisite: Mathematics 2, 4.

15-16. Strength of Materials.—Graphical methods of determining the elastic curve of beams; centroids and moments of inertia of areas; reinforced concrete beams and columns; properties and tests of engineering materials. (For students in architecture and others without the prerequisites required for Theoretical and Applied Mechanics 29.) Murdock's *Strength of Materials. Laboratory every other week; I, II;* (3). Mr. NOERENBERG and others

Prerequisite: Theoretical and Applied Mechanics 14.

20. Analytical Mechanics.—The mechanics of engineering rather than that of astronomy and physics. Fundamental concepts; equilibrium, centroids and center of gravity, friction; engineering problems; statement of conditions and use of data. Maurer's *Technical Mechanics. II;* (3). Mr. NOERENBERG and others

Prerequisite: Mathematics 7, registration in Mathematics 9.

21. Analytical Mechanics.—Continuation of Theoretical and Applied Mechanics 20. Kinematics and kinetics. Maurer's *Technical Mechanics. I;* (2). Mr. NOERENBERG and others

Prerequisite: Mathematics 9; Theoretical and Applied Mechanics 20.

25. Resistance of Materials.—A briefer course than Theoretical and Applied Mechanics 29. (For students in architectural engineering, ceramic and chemical engineering, electrical engineering, and mining engineering.) Merriman's *Mechanics of Materials. I;* (4).

Assistant Professor ENGER and others

Prerequisite: Mathematics 9; Theoretical and Applied Mechanics 20.

26. Analytical Mechanics and Hydraulics.—Kinematics, kinetics, and hydraulics; problems; experiments in the hydraulic laboratory. (For students in architectural engineering, electrical engineering, and mining engineering.) Maurer's *Technical Mechanics,* Hoskins' *Text-Book on Hydraulics. Laboratory weekly during the last half of semester. II;* (4).

Assistant Professor ENGER

Prerequisite: Theoretical and Applied Mechanics 25.

27. Analytical Mechanics.—Kinetics and kinematics. A longer course than Theoretical and Applied Mechanics 21. (To be given to mechanical engineering students during the transition period of changing courses.) Slocum's *Theory and Practise of Mechanics. I;* (3).

Prerequisite: Mathematics 9; Theoretical and Applied Mechanics 20.

29. Resistance of Materials.—The mechanics of materials; the properties and requirements for materials of construction; the effect of methods of manufacture upon the quality of the material; specifications and standard tests; experiments and investigations in the materials laboratory. (For students in civil engineering, mechanical engineering, and municipal and sanitary engineering.) Merriman's *Mechanics of Materials.* Recitations, lectures, and assigned reading; *laboratory weekly. I;* (5). Professor TALBOT and others

Prerequisite: Mathematics 9; Theoretical and Applied Mechanics 20; registration in Theoretical and Applied Mechanics 21.

36. Analytical Mechanics.—The portion of T. & A. M. 26, which involves analytical mechanics. (Open only to railway electrical engineering students.) Maurer's *Technical Mechanics. II;* (2).

Prerequisite: Theoretical and Applied Mechanics 25.

Courses for Graduates

Entrance upon graduate work in theoretical and applied mechanics presupposes a full undergraduate course in that subject.

101. Analytical Mechanics.—Methods; problems and applications; critical and comparative study of texts. *Twice a week; I; (1 unit).*

Professor MOORE

102. Resistance of Materials.—Properties of materials used in engineering construction and the methods of determining these properties; analysis and investigation in mechanics of materials; the effect of form of member in a structure or machine; the method of application of forces; comparative study of texts. *Twice a week; II; (1 unit).* Professor MOORE

103. Hydraulics and Hydraulic Engineering.—The laws of hydraulics and their application to engineering problems; hydraulic power and its development; design and investigation. *Twice a week; II; (1 unit).*

Professor TALBOT

104. Experimental Work in the Laboratory of Applied Mechanics.—Investigation on materials and on their action as used in machines and struc-

tures; experiments with pumps, motors, and measuring devices; investigation of the laws of hydraulics, the development of power, and the study of various hydraulic problems. *Twice a week; I, II; (½ unit to 2 units).*

Professor Moore

105. Experimental and Analytical Work in Reinforced Concrete.—Research: interpretation of available experimental results and their application to the design of structures; principles of construction. *Twice a week; I, II; (½ unit or more).* Professor Talbot

SUMMER SESSION COURSES

S 7. Analytical Mechanics.—The first half of Analytical Mechanics as given in Maurer's *Technical Mechanics.* (3). Mr. Ensign

Prerequisite: Mathematics 7 and registration in Mathematics 9.

S 8. Analytical Mechanics.—The second half of Analytical Mechanics as given in Maurer's *Technical Mechanics.* (2½.) Mr. Seely

Prerequisite: Mathematics 9 and T. & A. M. 7.

S 9. Resistance of Materials.—The mechanics of materials; experiments and investigations to verify the experimental laws; problems in ordinary engineering practise. Merriman's *Mechanics of Materials.* (3½.)

Mr. Seely, Mr. Gonnerman

Prerequisite: T. and A. M. 7 and registration in T. and A. M. 8.

S 10. Hydraulics.—The pressure and the flow of water; its utilization as motive power; observation and measurement of pressure, velocity, and flow, in power and efficiency; determination of experimental coefficients. Hoskins' *Hydraulics.* (3.) Mr. Gonnerman

Prerequisite: T. and A. M. 8.

Note— With the opening of the hydraulic laboratory for the Summer Session, arrangements may be made to use its facilities for special experimental work.

S 14. Elements of Mechanics.—Kinematics, kinetics, and statics and their application. Moreley's *Mechanics for Engineers.* (For architects and others who have not taken the calculus.) (4.) Mr. Ensign

Prerequisite: Mathematics 2, 4.

MEDICINE

(See under College of Medicine)

METEOROLOGY

(See under Geology)

MILITARY SCIENCE

Frank Daniel Webster, Major U. S. Infantry, *Professor and Commandant*
Frederick William Post, 1st Sergeant, U. S. A., retired, *Administrative Assistant*
Joseph Nathaniel Greene, *Assistant*
Augustus Henry Grunewald, *Assistant*
Edward Charles Elles, *Assistant*
Walter Clark Armstrong, *Assistant*
Ernest Howard Pool, *Assistant*
Clifford F Hood, *Assistant*

Lloyd Dunaway Knapp, *Assistant*
Harold Edward Barden, *Assistant*
Joseph Columbus Hostetler, *Assistant*
Roe Niver, *Assistant*

1. Theoretical Instruction.—Infantry Drill Regulations. For all freshmen men. *II;* (1). Professor Webster

2a-2b-2c-2d. Practical Instruction.—*Infantry*—School of the soldier; company and battalion; regimental ceremonies. *Artillery*—School of the cannoneer and battery dismounted. Freshmen and sophomore years. One and one-half hours' drill each week until March 15; after that date, three hours each week. *I, II;* (1). Professor Webster

3. Theoretical Instruction.—For sophomores: Drill Regulations and Military Administration. For juniors and seniors: Field Service Regulations; Field Engineering. This course is obligatory upon commissioned officers and sergeants, recommended to corporals, and open to others. *I, II.*
Professor Webster

Authorized Text-Books.—Infantry Drill Regulations; Army Regulations; Field Service Regulations; Guard Manual; Small Arm Firing Regulations; Manual of Military Training.

MINERALOGY

(See Geology 5, 5a, 6, 7)

MINING ENGINEERING

Harry Harkness Stoek, B.S., E.M., *Professor*
Robert Young Williams, A.B., E.M., *Director, Miners and Mechanics Institutes*
Elmer Allen Holbrook, B.S., *Assistant Professor*
Stephen Osgood Andros, A.B., B.S., E.M., *Associate*
Alfred Copeland Callen, E.M., M.S., *Instructor*

1. Earth and Rock Excavation.—Explosives; blasting; drilling; boring; tunneling; shaft sinking; coal cutting; timbering; prospecting. *II;* (3).
Mr. Callen

Prerequisite: Chemistry 1a or 1b.

2. Elementary Mining Principles.—General processes, terminology. Lectures; trips of inspection. *I* or *II;* (1). Professor Stoek

3. Mining Principles.—Terminology; explosives; blasting; drilling; tunneling; shaft-sinking; mining and timbering of flat deposits. (For students in ceramics, and engineering courses other than mining.) *I;* (2). Mr. Callen

Prerequisite: Chemistry 1a or 1b.

4. Mining Methods.—Mining and timbering of bedded, vein, and placer deposits. *II;* (2). Professor Stoek

Prerequisite: Mining Engineering 2.

5. Mine Ventilation.—Mine gases; safety lamps; mine ventilation; mine lighting; explosions in mines; mine fires; rescue work; first aid. *I;* (2).
Professor Stoek, Mr. Callen

Prerequisite: Chemistry 1a or 1b.

6a-6b. Mechanical Engineering of Mines.—Hoisting: ropes, cages, hoisting engines, and other appliances. Haulage: the different systems used

underground and on the surface; the methods of loading and unloading; mine stables; transportation of workmen. Signaling. Drainage of mines: mine dams, mine pumps. *I;* (3), *II;* (2). Mr. Callen

Prerequisite: Mechanical Engineering 1, or equivalent.

8. Mine Administration, Organization, and Mining Law.—Mining companies. Trade agreements—relations between employers and employees. Transportation and marketing. The general mining laws of the several states, with particular attention to those of Illinois. *II;* (2). Professor Stoek

9. Preparation of Coal and Ores.—Coal washing: history, application, principles, processes, and machines used in the preparation and washing of anthracite and bituminous coal; American and foreign practise. Breaking, pulverizing, and concentrating ores and mineral products. *I;* (3).

Assistant Professor Holbrook

Prerequisite: Chemistry 1a or 1b, 2 and 3; Physics 1a-1b and 3a-3b.

13. Utilization of Fuels.—The manufacture, handling, and utilization of wood, charcoal, peat, lignite, bituminous and anthracite coal, coke, petroleum, natural and artificial gas, and refractories in mining and metallurgical practise. *II;* (2). Assistant Professor Holbrook

41. Mine Design.—Framed structures; design of mine structures of wood, steel, and masonry. Tipple arrangements; rock houses; ore bins; general surface plant; design and drafting of mining and metallurgical plant. *I;* (3). Assistant Professor Holbrook

Prerequisite: Civil Engineering 60.

42. Mine Plant.—General layout; design; estimates for construction; specifications for mining and metallurgical plants. *II;* (2).

Assistant Professor Holbrook

Prerequisite: Mining Engineering 41.

62. Mine Surveying.—The application of surveying methods to mine work; instruments employed underground and in connecting surface and underground surveys; the platting and use of mine maps; mineral land surveying; the theory and use of solar attachments; determination of the meridian: stadia; application of topographic and railroad surveying to mining conditions; estimation and prospecting of mineral deposits. *II;* (4). Mr. Callen

Prerequisite: Civil Engineering 27.

64. Mining Laboratory.—Different coals; their availability for washing; complete commercial tests, using small commercial machines wherever possible; design of flow sheets; analysis of products; briquetting of fuels; concentration tests on a lead, zinc, or iron ore; amalgamation and cyanidation of a gold ore. *II;* (2). Assistant Professor Holbrook

Prerequisite: Mining Engineering 9.

90. Seminar.—Review of mining literature; reports. *II;* (1).

91. Seminar.—Review of mining literature; reports. *I; (no credit).*

100. Thesis.—Individaual investigation; preparation of thesis giving review of the literature, results of experimental work, and general discussion. *II;* (3).

(Hours arranged when thesis is permitted, in accordance with regulations of the College of Engineering.)

Courses for Graduates

Entrance upon graduate work in mining engineering presupposes a full undergraduate course in that subject.

101. Advanced Mining Methods.—Coal and ore fields of the United States; methods and economics of mining; utilization, marketing, storage, and transportation of coal and ores. *Twice a week; I; (1 unit). II; (1 unit).*
Professor Stoek

102. Advanced Preparation of Coal and Ores.—Settling ratios, laws of crushing; sorting vs. sizing; mill and washing problems. *Twice a week; I; (1 unit). II; (1 unit).* Assistant Professor Holbrook

103. The History of Miners' Organizations; Their Effect Upon the Development of Mining Practise.—*Twice a week; I; (1 unit). II; (1 unit).*
Professor Stoek

104. Mining Reports.—The law of apex, the classification of coal and ore lands; conservation of mineral resources; mine examination and report. *Twice a week; I; (1 unit).* Professor Stoek

MODERN LANGUAGES

(See English Language and Literature, Germanic Languages and Literature, and Romance Languages and Literature.)

MUNICIPAL AND SANITARY ENGINEERING

Arthur Newell Talbot, C.E., *Professor*
Melvin Lorenius Enger, B.S., C.E., *Assistant Professor, Theoretical and Applied Mechanics*
Paul Hansen, B.S., *Associate*
Harold Eaton Babbitt, B.S., *Instructor*

2. Water Supply Engineering.—Source of supply; hydraulics of wells; stream flow; impounding and storage reservoirs; conduits and pipe lines; pumps and pumping machinery; stand-pipes and elevated tanks; the distribution system; tests and standards of purity of potable water. Designing weekly. Turneaure and Russell's *Public Water Supplies. I;* (4).
Assistant Professor Enger, Mr. Babbitt

Prerequisite: Theoretical and Applied Mechanics 29, 10; Chemistry 1; Mechanical Engineering 1.

3. Sewerage.—The design and methods of construction of sewerage systems; sanitary necessity of sewerage; water carriage systems, both separate and combined; surveys and general plans; hydraulics of sewers; house sewage and its removal; relation of rainfall to storm water flow; determination of size and capacity of sewers; forms and strength of sewer appurtenances; modern methods of sewage disposal; estimates and specifications. Designing weekly. Folwell's *Sewerage; II;* (3). Mr. Babbitt

Prerequisite: Theoretical and Applied Mechanics 29, 10; Chemistry 1; Municipal and Sanitary Engineering 2.

6a-6b. Water Purification, Sewage Disposal, and General Sanitation.—Impurities in water supplies and methods and processes of their removal; sewage disposal by filtration, chemical precipitation, irrigation; representative purifi-

cation plants; garbage collection and disposal; sanitary restrictions and regulations and general sanitation. Lectures; seminar work; drafting. *I;* (3), *II;* (2).
Professor Talbot, Mr. Hansen, Mr. Babbitt

Prerequisite: Municipal and Sanitary Engineering 2, 3; Chemistry 1, 3, 10b.

7. Water Supply Engineering.—(Similar to Municipal and Sanitary Engineering 2, for students in sanitary science.) Designing weekly. Turneaure and Russell's *Public Water Supplies. I;* (4). Mr. Babbitt

Prerequisite: Theoretical and Applied Mechanics 10; Chemistry 3.

8. Sewerage.—(Similar to Municipal and Sanitary Engineering 3, for students in sanitary science.) Designing weekly. Folwell's *Sewerage. II;* (3).
Mr. Babbitt

9. Hydraulic Design and Construction.—Reservoirs, dams, conduits, and waterways; hydraulic engineering problems. *II;* (2).
Assistant Professor Enger

30. Thesis.—Investigation or design of an engineering problem. *II;* (2). Professor Talbot, Mr. Babbitt

Courses for Graduates

Entrance upon graduate work in municipal and sanitary engineering presupposes a full undergraduate course in that subject.

102. Water Supply Engineering.—Water supply; general water-works construction; pumps and pumping; design of reservoirs and elevated tanks; water-works operation and the valuation of plants. *One to three times a week; I* or *II; (1 unit).* Professor Talbot

103. Sewerage.—Design and construction; systems; hydraulics of sewers; a study of run-off. *Once or twice a week; II; (1 unit).*
Professor Talbot

106. Water Purification, Sewage Disposal and General Sanitation.—The design, construction, and operation of water purification plants and of sewage disposal works; the study of existing plants; comparison of results and cost of construction and operation; experimental work on water filters and septic tanks; garbage disposal; general sanitation. *Once a week; II; (½ unit).*
Professor Talbot

MUSIC

John Lawrence Erb, F.A.G.O., *Director, University Organist*
George Foss Schwartz, A.M., Mus.B., *Assistant Professor, Theory and History of Music*
Constance Barlow-Smith, *Assistant Professor, Sight-Singing, Ear Training, Public School Music*
Henri Jacobus van den Berg, *Instructor, Piano*
Albert Austin Harding, *Instructor, Wind Instruments, Director of the Band*
Florence Mary Kirkup, *Instructor, Voice*
Edson Wilfred Morphy, *Instructor, Violin*
Edna Almeda Treat, Mus.B., *Instructor, Piano*
Lowell Leslie Townsend, A.M., *Instructor, Piano*
Heber Dignam Nasmyth, *Instructor, Voice*
Anna Viola Simon, *Instructor, Voice*

SUMMER SESSION ONLY

Adeline Brainard, *Assistant*

History and Theory

1-2. History of Music.—The development of music; the rise of polyphony and dramatic music; the origin and progress of the oratorio; the evolution of instruments and instrumental forms; the lives of composers. Lectures; assigned collateral readings. *I, II;* (2). Assistant Professor SCHWARTZ

3-4. Harmony.—*I, II;* (2). Assistant Professor SCHWARTZ

5-6. Advanced Harmony.—*I, II;* (3). Assistant Professor SCHWARTZ

7-8. Counterpoint, Canon, and Fugue.—*I, II;* (3). Director ERB

9-10. General Theory, Free Composition.—*I, II;* (2). Director ERB

11-12. Acoustics.—*I, II;* (1). Director ERB

Piano[1]

Director ERB, Mr. VAN DEN BERG, Miss TREAT, Mr. TOWNSEND

41a-41b, 41c-41d, 41e-41f. Preparatory Course: Three Years.—Special attention is given to the formation of a correct touch and technique, and to intelligence in interpretation. In the examination at the conclusion of the course students are required to play: Simple scales and arpeggios at fairly rapid tempo; scales in double octaves at a moderate speed; Bach, *little preludes* and *fugues;* Czerny, *Op. 229;* an early sonata of Haydn. *I, II;* (no collegiate credit).

42a-42b. First Year.—Development of technique; scales and arpeggios in various forms; *Etudes;* Bach, *Two-part inventions;* sonatas of Haydn and Mozart; earlier sonatas of Beethoven; Mendelssohn, selected compositions. *I, II;* (6).

46a-46b. One Year.—The first year's work in piano taken as a minor by senior collegiate students majoring in voice or violin. *I, II;* (2).

43a-43b. Second Year.—Development of technique; scales in double thirds; Bach, *Three-part inventions;* selections from *French and English Suites;* sonatas and other compositions. *I, II;* (6).

44a-44b. Third Year.—Development of technique; scales in double sixths; *Octave Studies, Bk. II;* Bach, *Welltempered Clavichord;* Clementi, sonatas and concertos; selected compositions. *I, II;* (6).

[2]**45a-45b, 46a-46b, 47a-47b. Fourth Year: Daily Studies.**—Tausig-Ehrlich, *Bk. II* and Brahms; *Octave Studies,* Chovan, Sinding, and others; *Etudes,* Chopin, Alkan, Liszt, Godowsky, and Rubinstein. Selections and concertos. *I, II;* (6).

Voice[1]

Mr. NASMYTH, Miss KIRKUP, Miss SIMON

51a-51b, 51c-51d, 51e-51f. Preparatory Course: Three Years.—The fundamental principles of voice culture, viz., correct breathing and the proper placing of the voice. In the examination at the conclusion of the course students are required to sing: Simple scales and arpeggios; studies selected from Concone, Sieber, Panofka, and Panseron; songs selected from Schubert, Schumann, and Mendelssohn. *I, II;* (no collegiate credit).

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[1]Since it is undesirable and impossible to establish a set course for all students, the course outline given above must be taken only as indicating the general scope of the work required of each student.

[2]Students who major in piano and who are taking Music 45 are required to take Music 94.

52a-52b. First Year.—Fundamental principles of tone production, simple exercises for breath control; vocalises; songs; Lieder; for enunciation, and interpretation. Vocal hygiene, and physiology of the vocal organs. *I, II;* (6).

53a-53b. Second Year.—Tone production (continued), breath control, scales, and arpeggios for flexibility, poise and sustained tone; vocalises; vocal hygiene; sacred and secular songs and ballads; classical German Lieder. *I, II;* (6).

54a-54b. Third Year.—Advanced exercises for tone production, and breath control in public singing; vocalises continued; vocal hygiene; simple arias from oratorios and operas. Advanced songs in English, French, German, and Italian. Lieder selected from Mendelssohn, Brahms, Grieg, Dvorak, Schubert, Schumann, Hugo, Wolff, and Richard Strauss. *I, II;* (6).

55a-55b.[1] **Fourth Year.**—Preparation for graduation; deportment; diction, interpretation, public recital, the advanced lieder, oratorio, and operatic arias, and classical and modern. *I, II;* (6).

56a-56b. Voice: One Year.—The first year's work in voice taken as a minor by senior collegiate students majoring in piano or violin. *I, II;* (2).

57a-57b. Voice.—For students from other departments of the University. *I, II;* (no credit).

Violin[2]

Mr. Morphy

61a-61b. Preparatory Course: First Year.—*Methods:* Gruenberg; Sevcik; F. Hermann; Wohlfahrt, R. Hoffmann, selected compositions.

61c-61d. Preparatory Course: Second Year.—*Methods:* Gruenberg, Sevcik, Kayser, Wohlfahrt, Alard, selected compositions. *I, II;* (no credit).

61e-61f. Preparatory Course: Third Year.—*Methods:* Gruenberg, Schradieck, Sevcik. *Etudes:* Kayser, Dont, Wohlfahrt, selected compositions. *I, II;* (no credit).

62a-62b. First Year.—David, *Violin School;* Gruenberg, *Foundation Exercises;* Schradieck, *Violin Technics. Etudes:* Kreutzer, E. Herrmann, Sevcik. *Compositions:* Mozart, *Sonatas and selected compositions. I, II;* (6).

63a-63b. Second Year.—David, *Violin School;* Sevcik, Gruenberg, Singer, Kreutzer, Libon, Alard, *Compositions:* Beethoven, *Sonatas and selected compositions. I, II;* (6).

64a-64b. Third Year.—David, *Violin School;* Sevcik, Gruenberg. *Etudes:* Kreutzer, Rodes, Fiorillo, Sevcik, Rovelli. *Compositions:* Bach, *Concertos,* Beethoven, de Beriot, Corelli, Mozart, Hauser. *I, II;* (6).

65a-65b. Fourth Year.—Sauret, *Technical Studies;* Sevcik, *Op. 1;* Sevcik, *Op. 2. Etudes:* Gavinies, Paganini, Tartini, Vieuxtemps, *Compositions, selected sonatas and concertos. I, II;* (6).

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[1]Students who major in voice and who are taking Music 55 are required to take Music 94.

[2]Since it is undesirable and impossible to establish a set course for all students, the course outline given above must be taken only as indicating the general scope of the work required of each student.

Each year, before registration, students are requested to have their instruments inspected by a reliable repairer.

66a-66b. Violin: One Year.—The first year's work in violin taken as a minor by senior collegiate students majoring in piano or voice. *I, II;* (2).

67a-67b. Violin.—For students from other departments of the university. *I, II;* (no credit).

Violoncello[1]

Assistant Professor SCHWARTZ

71a-71b, 71c-71d, 71e-71f. Preparatory Course: Three Years.—At the conclusion of the course the student will be examined upon the following: DeSwert, *Cello Method;* Klengel, *Technical Studies;* Litolff, *Volkslieder Album,* two parts; Marx Markus, *Op. 40;* characteristic pieces. *I, II;* (no collegiate credit).

72a-72b. First Year.—Dotzauer, *Selected Studies;* Furino, *Polonaise;* Golterman, *Nocturnes;* Kengel, *Concertino. Op. 7. I, II;* (6).

73a-73b. Second Year.—Lee Studies: *Op. 31, No. 1;* Romberg, *Op. 42, 46, 65;* Golterman, *Concerto in G. I, II;* (6).

74a-74b. Third Year.—Lee Studies: *Op. 31, No. 2;* Golterman, *Concerto in D;* Klengel, *Concertstück in D. I, II;* (7).

75a-75b. Fourth Year.—*I, II;* (6).

76a-76b. One Year.—As a minor. *I, II;* (2).

77a-77b. For students from other departments of the university. *I, II;* (no credit).

Organ[1]

Director ERB

Students desiring to take organ will be obliged to pass without conditions the entrance examination in piano. Under no circumstances will they be accepted if their piano work falls below the standard represented by this examination.

81-82. First Year.—Rogers, *Graded Materials for Pipe Organ;* Rinck, *Organ School,* Books I, II; Stainer, *The Organ* (edited by Rogers); Bach, *Eight Little Preludes and Fugues;* selected compositions. *I, II;* (6).

83a-83b. One Year.—The first year's work in organ taken as a minor by senior collegiate students majoring in piano, voice or violin. *I, II;* (2).

84-85. Second Year.—Buck, *Studies in Pedal Phrasing;* Rinck, *Organ School,* Book III; Reimann, *Op. 8, Part II;* Mendelssohn, *Sonata II; Prelude and Fugue II in G;* Van Eyken, *Sonata II;* Bach, *Preludes and Fugues in C minor and E minor;* Miscellaneous pieces. *I, II;* (6).

86-87. Third Year.—Reimann, *Op. 8, Part III;* Nielsen, *Technical Studies in Pedal Playing;* G. Ad. Thomas, *Op. 2, Book I;* Bach, *Fugue G minor; Prelude and Fugue C;* Guilmant, *Sonata III;* Rheinberger, *Sonata IV;* miscellaneous pieces. *I, II;* (6).

88-89. Fourth Year.—G. Ad. Thomas, *Op. 2, Book II;* Bach's larger works; Sonatas by Guilmant, Rheinberger, Merkel; Symphonies by Widor; Bartlett, *Suite Op. 205;* recital pieces by composers of all schools. *I, II;* (6).

[1]Since it is undesirable and impossible to establish a set course for all students, the course outline given above must be taken only as indicating the general scope of the work required of each student.

Public School Music

Assistant Professor CONSTANCE BARLOW-SMITH

21a-21b. Ear Training, First Year.—Two hours a week; required of all music students. *I, II;* (no credit).

22a-22b. Ear Training, Second Year.—Two hours a week; required of students in the Course in Music in the sophomore year, and of students in the Course in Public School Music. *I, II;* (1).

23a-23b. Sight Singing, First Year.—Two hours a week; required of students in the Course in Music in the sophomore year, and of students in the Course in Public School Music. *I, II;* (no credit).

24a-24b. Sight Singing, Second Year.—Two hours a week; required of students in the Course in Music in the junior year, and of students in the Course in Public School Music. *I, II;* (1).

25a-25b. Methods of Teaching.—Elements of theory, eye and ear training, the limitations of the child-voice, selection of material, pedagogical presentations, appreciation work for the high school. (Offered primarily for students who desire to teach music successfully in the public schools.) *I, II;* (4).

Band, Orchestra, and Ensemble Work

91a-91b. University Orchestra.—Two-hour rehearsal once a week. *I, II;* (no credit). Director ERB, and Mr. MORPHY

92a-92b. University Choral Society.—One hour rehearsal once a week. *I, II;* (½). Director ERB

93a-93b. Band Instruments.—Wind instruments in band, orchestra, or solo work. *I, II;* (no credit). Mr. HARDING

94a-94b. Ensemble Class.—Trios, quartets, and quintets by classical and modern composers. (Open to all students who are sufficiently advanced to undertake the course profitably.) *I, II;* (no credit).

95a-95b. Recital.—Required of all students majoring in a practical subject. *I,* (2); *II,* (3).

96a-96b. Band Instrumentation.—Compass, pitch, tone quality, details of mechanism, and practical employment of the instruments used in the modern military band. *II;* (no credit).

97a-97b. Band Arranging.—Methods of scoring for the modern military band; the making of commercial arrangements for average bands; scoring for the complete concert band; re-arranging foreign editions for American bands; making band arrangements from piano scores; transscribing orchestral works for military band; analysis and performance of full score extracts; demonstrations of instrumental grouping. *II;* (no credit).

SUMMER SESSION COURSES

Methods of Teaching

S 1. Primary and Intermediate Grades.—Rote songs and various important technical problems necessary to successful work in the eight grades; proper care of children's voices; correct breathing and interpretation.

Assistant Professor SMITH

S 2. High School Appreciation Course.—Classes and equipment; voice culture as applied to the adolescent voice; fundamental principles of harmony; musical history. (1½.) Assistant Professor Smith

S 3. General Appreciation Course.—For the non-musician; illustration on the victrola. *(No university credit.)* Assistant Professor Smith

S 4. Theory and Ear-Training.—Fundamental principles of music; oral and written; dictation; and vocal harmony. *(No university credit.)*
Miss Brainard

Sight-Singing

S 5. Elementary Course.—Music-notation; syllables; scale structure; ear and eye-training and application of knowledge to music reading. *(No university credit.)* Miss Brainard

S 6. Advanced Course.—Drill in one, two, three and four-part reading, exercises for breath control, enunciation and phrasing. *(No university credit.)*
Miss Brainard

Campus sings every Wednesday evening at 6:45, Auditorium steps.
Assistant Professor Smith

PALEONTOLOGY

(See Geology 1a, 16, 18, 19, 20, 21.)

PHILOLOGY

(See Classics, English Language and Literature, Germanic Languages and Literature, and Romance Languages and Literature.)

PHILOSOPHY

(See also Psychology and Education.)

Arthur Hill Daniels, Ph.D., *Professor*
Boyd Henry Bode, Ph.D., *Professor*
Queen Lois Shepherd, Ph.D., *Instructor*
Carl Herman Haessler, A.B., *Assistant*

Students who make philosophy a major should take at least six hours of psychology. The six hours in psychology may be counted towards a major of 20 hours in philosophy. This major must include philosophy 1, 2, 3, 4, and one other advanced course.

With the exception of 1 and 10, no course in philosophy may be taken before the completion of two years of university work.

Honors

Candidates for honors in philosophy must offer:

1. In the major subject, 24 hours, 6 of which must be in psychology.

2. Minors in either: psychology (at least 6 hours in addition to the amount of psychology required for the major) and any one other subject listed below; or any two subjects from the same group—

(a) Economics; history; political science; education; sociology.
(b) English; French; German; Greek; Latin.
(c) Botany; chemistry; mathematics; physics; zoology.

No course in any subject of the above groups may be counted for the minor requirement if it is excluded from the major requirement of its respective department.

Courses for Undergraduates

1. Logic.—The principles of reasoning; detection of fallacies; evidence. *I;* (3). Professor Bode, Dr. Shepherd, Mr. Haessler

Prerequisite: One year of university work.

2. Introduction to Philosophy.—Philosophic problems in their relation to the doctrine of evolution and in their bearing on conduct and religion. *II;* (3). Professor Bode, Dr. Shepherd, Mr. Haessler

9. Political and Social Ethics.—Moral principles applied to political and social relations. *I;* (2). Professor Daniels

[**10. The Philosophic Thought of the Nineteenth Century as Reflected in English Literature.**—Wordsworth; Carlyle; Emerson; Tennyson; Browning; Arnold. *I;* (2). Not given, 1914-15.]

Courses for Advanced Undergraduates and Graduates

3. Ancient and Medieval Philosophy.—The development of philosophic thought; the Greek philosophers; the medieval period. *I;* (3). Professor Daniels

Prerequisite: Three hours in philosophy.

4. History of Modern Philosophy.—Problems and conceptions in philosophy from Descartes to the present time. Selections from the masterpieces of this period. *II;* (3). Professor Daniels

Prerequisite: Three hours in philosophy.

7. Ethics.—The beginnings and growth of morality; leading conceptions of ethical theory; typical social and economic problems of the present. *II;* (3.) Professor Daniels

Prerequisite: Three hours in philosophy.

[**8. Esthetics.**—The appreciation of art and nature; place of such appreciation in life; primitive arts and appreciation; modifications of the esthetic (such as the sublime and the ugly); the fine arts. *I;* (3). Not given in 1914-15.

Prerequisite: An elementary course in philosophy or psychology.]

11. Philosophy of Religion.—The philosophical interpretation of religious consciousness; various religious concepts; God; revelation; inspiration; dogma; faith; prayer; immortality; evil; morality and religion. *II;* (2). Professor Daniels

Prerequisite: Senior or graduate standing; six hours in psychology, philosophy, or both.

15. The British Philosophers of the Eighteenth Century.—Locke, Berkeley, and Hume. *I;* (3). Professor Bode

Prerequisite: Philosophy 2 or 3 or 4.

16. American Philosophy.—*II;* (3). Professor Bode

Prerequisite: Philosophy 15.

17. Advanced Logic—*I;* (3). Dr. Shepherd

Prerequisite: Philosophy 1.

18. Logical Theory in Its Bearing on Philosophical Problems.—*II;* (3). Dr. SHEPHERD

Prerequisite: Philosophy 17.

19. The Development of Religious Thought in the Eighteenth and Nineteenth Centuries.—*I;* (3). Dr. SHEPHERD

Prerequisite: Philosophy 2 or 3 or 4.

Courses for Graduates

A student entering upon graduate work in philosophy must have had a thorough general course in the history of philosophy, a course in logic, and a general course in psychology.

102. Seminar, Contemporary Philosophy.—Present day idealism, realism, and pragmatism. *Once a week; I, II; (1 unit).* Professor BODE

[**106. Seminar, Contemporary Philosophy.**—The philosophy of Bergson. *Twice a week; I, II; (1 unit).* Not given in 1914-15.] Professor BODE

103. Seminar, Ethical Theory.—*Twice a week; I, II; (1 unit).* Professor DANIELS

107a-107b-107c. History of Philosophy.—a: The philosophy of Plato and Aristotle. *Twice a week; (1 unit).* b: The philosophy of Descartes, Spinoza, and Leibnitz. *Twice a week; (1 unit).* c: The philosophy of Kant and Schopenhauer. *Twice a week; (1 unit). I, II.* (The subjects in 1914-15 will be determined by the needs of the students registered.) Professor DANIELS

PHOTOGRAPHY

ARTHUR GRENVILLE ELDREDGE, *Instructor*

1. The Principles and Practise of Photography.—Designed for advanced students who need to use photography in connection with their special subjects. Lenses; cameras; plates and films; exposure; development; printing; copying; positives; landscape, architectural, and scientific photography; speed work; color photography. Lectures and demonstrations; each student is required to produce a stated amount of work covering the processes treated. *II; (one hour a week, no credit).* Mr. ELDREDGE

Prerequisite: Junior standing and the consent of the instructor.

PHYSICAL TRAINING

For Men

GEORGE A HUFF, *Director*
HARRY LOVERING GILL, *Instructor, Track*
ROY NEWTON FARGO, B.S., *Instructor and Director of the Men's Gymnasium*
EDWARD JOHN MANLEY, *Instructor, Swimming*
RALPH JONES, *Assistant*
SIDNEY CASNER, *Assistant*

SUMMER SESSION ONLY

ROBERT CARL ZUPPKE, *Foot Ball Coach*

1-2. Gymnasium Practise.—Two hours' gymnasium drill each week. (Required of freshmen.) *I, II;* (½). Mr. FARGO

1a. **Personal Hygiene.**—Six lectures. Required in conjunction with Physical Training 1. *I;* (½). Dean Clark

SUMMER SESSION COURSES

Athletic Coaching and Playgrounds

Director Huff, Mr. Gill, Mr. Jones, Mr. Zuppke, and Mr. Casner

S 10. Baseball.—Batting; base running; proper methods of fielding each position; team work and coaching methods; study of the rules; physical condition; methods of indoor practise. Lectures and practical work. (2).
Director Huff

S 11. Track and Field Athletics.—Starting, sprinting, distance running, hurdling, high and broad jumping, pole vaulting, shot putting, hammer throw, and discus; methods of preparing contestants for different athletic events; adaptations to individual peculiarities; rules of competition; study of physical condition, including endurance, speed, fatigue, training for condition; work is assigned for the promotion, management, and officiating of games and meets. (2)
Mr. Gill

S 12. Basketball.—Instruction in basketball to fit men to coach. Passing, goal throwing, dribbling, team play, how to condition a team, and the different styles of play used by the leading coaches. Lectures and practical work. (2). Mr. Jones

S 13. Football.—

Theoretical:

a. Rules from the standpoint of coach, players, and officials.
b. Several styles of offense and defense with consideration of their special strengths and weaknesses.
c. Generalship and strategy.

Practical:

a. Training, conditioning, and players' equipment.
b. Punting, drop kicking, place kicking, kick off, and forward passing.
c. Tackling dummy and charging sled.
d. Special drills for linemen, ends, and backs.
e. Following the ball, interference, and team work.
f. Fundamental plays, freak plays, and signal systems.

Lectures and practical work. (2). Mr. Zuppke

S 14. Play and Play Grounds.—Philosophy of play; theories of Schiller, Spencer, and Froebel; educative value of play; the playground movement, its aims and purposes; child study; games and other activities of the playground; exercises adapted to the age of child, time of day and season, corrective gymnastics; first aid to the injured, with special attention to playground injuries; construction and equipment of playgrounds; types of apparatus; administration and management; use as a social center; personal qualifications of the director. Mero's *American Playground,* Deland's *Playground Technique and Playcraft,* Bancroft's *Games.* Inspection trips. Lectures and practical work. (2).
Mr. Casner

PHYSICAL TRAINING

For Women

Gertrude Evelyn Moulton, A.B., *Director*
Verna Brooks, A.B., *Instructor*

Edith Griffith Osmond, A.B., B.S., *Instructor*
Anna Sue Hughitt, *Assistant*
*Dorothy Ruth Shoemaker, A.B., *Assistant*
Rosa-Lee Gaut, Mus.B., *Assistant*

7a-7b. **Practise.**—Class work; light gymnastics, gymnastic dancing, and games; personal hygiene; corrective work. Required of freshmen. *I, II;* (1). Miss Moulton, Miss Brooks, Miss Hughitt, Miss Shoemaker, Miss Osmond

8a-8b. **Practise.**—(Continuation of 7a-7b. Second year, elective.) *I, II;* (1). Miss Brooks, Miss Hughitt, Miss Osmond

9. **Hygiene.**—Required of freshmen. *I;* (1). Acting Dean Kyle

10a-10b. **Teachers' Course.**—Third year. Theory and practise teaching in the gymnasium and in public playgrounds. *I, II.* Miss Osmond
Prerequisite: One year of gymnasium work, psychology, or education; registration in P. T. 7 or 8.

11a-11b. **Teachers' Course.**—Fourth year. Massage, theory and practise; emergencies (including bandaging); anthropometry, practise work in measurements for physical examinations. *I, II.* Miss Hughitt
Prerequisite: P. T. 10.

SUMMER SESSION COURSES

S 1. **Methods of Improving Posture and Health; Theory and Practise.**—Corrective work, Swedish, clubs and other exercises. Hygienic work, games, dancing, and other exercises. Lectures, practise, and reading. Bancroft's *The Posture of School Children.*

S 2. **Swimming.**—Games, diving, "stunts."

PHYSICS

Albert Pruden Carman, D.Sc., *Professor*
Charles Tobias Knipp, Ph.D., *Assistant Professor*
Floyd Rowe Watson, Ph.D., *Assistant Professor*
William Frederick Schulz, E.E., Ph.D., *Assistant Professor*
Jakob Kunz, Ph.D., *Assistant Professor, Mathematical Physics*
Elmer Howard Williams, Ph.D., *Associate*
Lloyd Theodore Jones, A.M., *Instructor*
William Henry Hyslop, A.M., *Assistant*
Oscar Alan Randolph, M.S., *Assistant*
Earle Horace Warner, A.M., *Assistant*
Sebastian Karrer, A.M., *Assistant*
Jonas Bernard Nathanson, A.M., *Assistant*
Paul Levern Bayley, A.M., *Assistant*
Charles Francis Hill, A.B., *Assistant*

SUMMER SESSION ONLY

Orrin Harold Smith, A.M., *Assistant*

*Resigned February 1, 1915.

Introductory Courses for Undergraduates

1a-1b. General Physics.—Lectures with class-room demonstration; recitations; written exercises. (For sophomores in engineering, mathematics, physics, and chemistry.) *I;* (3); *II;* (2).

Professor CARMAN, and others

Prerequisite: Registration in Physics 3a-3b. Freshman mathematics.

3a-3b. Physical Measurements.—Laboratory experiments; quizzes in connection with Physics 1a-1b. *I,* (2); *II,* (2).

Assistant Professor SCHULZ, and others

Prerequisite: Registration in Physics 1a-1b.

7a-7b. General Physics.—Lectures, with class-room demonstrations; recitations. (For students in arts and science.) *I, II;* (2½).

Assistant Professor WATSON, Dr. WILLIAMS, Mr. KARRER

Prerequisite: Completion of or registration in trigonometry. (Mathematics 4); registration in Physics 8a-8b.

8a-8b. Introductory Laboratory Physics.—Physical measurements. *I, II;* (2½). Dr. WILLIAMS, Mr. KARRER

Prerequisite: Registration in Physics 7a-7b.

9a-9b. General Physics.—Lectures, with class-room demonstrations; recitations. (For students in architecture.) *I, II;* (2).

Assistant Professor WATSON, Dr. WILLIAMS, Mr. KARRER

Prerequisite: Trigonometry (Mathematics 4); registration in Physics 10a-10b.

10a-10b. Introductory Laboratory Physics.—Physical measurements. *I, II;* (2). Dr. WILLIAMS, Mr. KARRER

Prerequisite: Registration in Physics 9a-9b.

15. Electricity and Magnetism.—Recitations; laboratory lectures, Brooks and Poyser's *Electricity and Magnetism;* one laboratory exercise weekly. *I;* (3). Assistant Professor KNIPP

Prerequisite: Physics 1a-1b, 3a-3b; or 7a-7b, 8a-8b.

[**14. Mechanics and Advanced General Physics.**—Theoretical physics involving the calculus. Dynamics, with a brief introduction to thermodynamics. *I;* (3). Not given in 1914-15.

Prerequisite: A course in general physics, such as Physics 7a-7b and 8a-8b, or 1a-1b and 3a-3b, and a course in calculus.]

16. Heat.—Fundamental heat phenomena, the mechanical theory of heat and elementary thermodynamics. Laboratory experiments in thermometry, calorimetry, vapor pressure, expansion of bodies, transmission of heat, mechanical equivalent, etc. *I;* (3). Assistant Professor WATSON

Prerequisite: Physics 1a-1b, 3a-3b; or 7a-7b, 8a-8b.

17. Light.—Reflection, refraction, interference, diffraction and polarization; laboratory experiments on these phenomena, and the theory and use of telescopes, microscopes, refractometers, prism and grating spectroscopes and interferometers. Edser's *Light for Students. I;* (2).

Assistant Professor SCHULZ

Prerequisite: Physics 1a-1b, 3a-3b; or 7a-7b, 8a-8b.

18. Teachers' Course.—Discussion of text-books, reference books, laboratory manuals, apparatus ordering, and methods of conducting work in physics. Manipulative work with glass and apparatus. Discussion of selected topics in advanced general physics. *II;* (2). Assistant Professor WATSON

Prerequisite: A course in general physics, or experience in teaching.

Advanced Courses for Graduates and Undergraduates

4a-4b. Electrical and Magnetic Measurements.—Exact electrical and magnetic measurements with accompanying theory. First semester: Refined and special methods of measuring very low and very high resistances; aperiodic and ballistic galvanometers; the measurement of electric currents and quantity; the comparison of capacities. Second semester: Absolute determination of capacity; the determination of the damping factor of a ballistic galvanometer; circuits containing resistance and self-induction; classical methods for the measurement of self and mutual induction; the magnetic properties of iron, curve plotting and hysteresis losses; types of potentiometers. For the first semester there is a special section for students of chemistry. A course of experiments has been arranged including the measurement of electrolytic resistances, the use of the Dolezalek electrometer, thermo-couples, and platinum resistance thermometers for measuring temperatures; the determination of the dielectric constants of solids and liquids; and special uses of the potentiometer. *I, II;* (2). Assistant Professor KNIPP, Mr. RANDOLPH, Mr. BAYLEY

Prerequisite: Physics 1a-1b, 3a-3b, or 7a-7b, 8a-8b and Mathematics 7, 9.

20. Light.—Special phenomena; modern theories; readings in texts of Drude, Wood, and Preston. Lectures; recitations. *I* or *II;* (2).

Prerequisite: Physics 1a-1b, 3a-3b; or 7a-7b, 8a-8b; Mathematics 7, 9, or 8.

22. Light-Photometry.—Lectures, recitations and laboratory experiments on the scientific principles and methods of photometry; the comparison of various light sources with standards; the determination of reflective power and transmission coefficients; spectrophotometry, etc. *II;* *(2 to 5).

Assistant Professor SCHULZ

Prerequisite: Physics 1a-1b, 3a-3b; or 7a-7b, 8a-8b.

23. Sound.—Phenomena of sound. The origin, propagation, velocity, and interference of sound, the vibration of strings, rods, and gas columns and the physical theory of music and speech. *II;* (3). Assistant Professor WATSON

Prerequisite: Physics 1a-1b, 3a-3b; or 7a-7b, 8a-8b. Calculus advised.

25. Heat.—Advanced laboratory work in heat; theory and methods of measurement of temperatures by thermo-couples, resistance thermometers and optical pyrometers. *II;* (2). Assistant Professor WATSON

Prerequisite: Physics 1a-1b, 3a-3b; or 7a-7b, 8a-8b. Physics 16 advised.

29. Electrical Currents and Oscillations.—Lectures, recitations, and laboratory measurements for advanced students in physics. The generation of currents, continuous and alternating, of both low and high frequencies. The physical problems of the currents and the generators are discussed. Two recitations and one laboratory exercise weekly. *I;* (3).

Prerequisite: Physics 4a-4b, Mathematics 7, 9, 16.

Professor CARMAN, Dr. WILLIAMS

*In registering for a course with variable credit hours, a student must put down on his study-list, *not* the possible hours, as shown here, but the number of hours for which *he* intends to take the course; e. g., not *2-5*, but *2*, or *3*, or *4*, or *5*.

30. Introduction to Theoretical Electricity.—Electrical phenomena discussed with calculus methods. Lectures; recitations; occasional demonstrations. Foster and Porter's *Electricity and Magnetism; II;* (3).

Assistant Professor KNIPP

31a-31b. Special Problems in Advanced Physical Measurements.—*I, II;* *(2-4). Professor CARMAN and others

32. Electricity and Magnetism.—Electrical measurements: special methods of measuring self and mutual inductance, capacity, etc.; measurement of low resistances; standardization and calibration work. *II;* (2).

Dr. WILLIAMS

Courses for Graduates

The prerequisite for graduate work in physics is a college course in general physics with a year's laboratory course in introductory physical measurements. The student who is to do major work in physics should also have had additional courses in physics or teaching experience, unless the training in his minor subjects, mathematics or chemistry, has been strong and complete. He should also have a knowledge of French and German sufficient to use references in these languages. The courses named below are those open for candidates for the Master's or Doctor's Degree. A large part of the last year's work of the candidate for the Doctor's degree is investigational, along either the experimental or the theoretical side of physics. In addition to these major graduate courses, the courses in elementary dynamics, heat, light, electrical measurements, and introductory electrical theory, are arranged with certain additions for graduate credit. The "intermediate" courses on heat, light, and electricity and magnetism may be offered by students making a minor in physics.

121. Recent Advances in Physics and the Electron Theory.—A series of lectures of a non-mathematical character, describing and discussing some of the more recent discoveries in physics, and showing by a considerable number of experiments some of the leading phenomena. The presentations and discussions will be of interest to the general student who wishes to obtain an insight into the present work and problems of physics. The main topics to be presented are: the molecular and atomic structure of matter; the universal occurrence of electrons; determination of the elementary charge of the electron by means of the fog method, by Brownin movements, by radioactivity; the cathode rays, canal rays, and Roentgen rays; ionization of gases through Roentgen rays; α, β, and γ rays; a short review of radioactivity; conduction of heat and electricity through metals, Zeeman phenomenon; the origin of light; emission and absorption spectra; chemical actions of the different rays; photoelectricity; and the structure of the atom. *Three hours a week.. II; (½ unit).*

Assistant Professor KNIPP, Assistant Professor KUNZ

[123. Sound.—Lectures and recitations. Rayleigh's *Sound,* Auerbach's *Akustik* and Barton's *Sound. Twice a week; I, II; (1 unit).* Not given in 1914-15.]

124. Conduction of Electricity Through Gases.—Electrical conductivity of gases, ions and ionisation, the effect of a magnetic field, the motion of ions, spark discharge, cathode rays. Roentgen rays, canal or positive rays, and related phenomena of radioactivity. *Three times a week; I, II; (1 to 2 units).*

Assistant Professor KNIPP

*In registering for a course with variable credit hours, a student must put down on his study-list, *not* the possible hours, as shown here, but the number of hours for which *he* intends to take the course; e. g., not 2-5, but 2, or 3, or 4, or 5.

126. Physics Colloquium.—Weekly meetings of the instructors and advanced students of the department for the presentation and discussion of papers on current problems in physics and investigations in progress in the laboratory; experimental demonstrations. All graduate students are expected to attend. *Once a week; I, II (¼ to ½ unit).*

127. Electron Theory.—*Theoretical part.* (A knowledge of differential equations and of light, electricity and magnetism is presupposed.) Topics to be considered: Maxwell's equations applied to electrons in motion, theory of relativity and electromagnetic emission theory of light. Optical properties of metals, conduction of heat and electricity through metals; Hall effect and related phenomena; the origin and nature of Roentgen rays; reflection and interference of Roentgen rays; theory of the dielectric constant and of dispersion of light; Zeeman phenomenon; the structure of the atom; and the theory of magnetism. *Twice a week; I, II; (½ to 1 unit).* Assistant Professor KUNZ

131. Investigation of Special Problems.—Advanced laboratory or design and calculation. A problem worked out with the advice and direction of the instructor. *Two to four times a week; I, II; (½ to 2 units).*
Professor CARMAN and others

[**132. Mathematical Physics.**—Special phases in theoretical physics:

(a) **Dynamics.**—*First part:* dynamics of a material system, determination of the center of gravity, moment of inertia and potential, potential theory, with applications in celestial mechanics. *Second part:* the principle of least action. Lagrange's equations, the theory of the top and its applications. The fundamental equations of elasticity, hydrodynamics, of the electro magnetic field and the second principle of thermodynamics for reversible processes deduced from the principle of least action. *Three times a week; I, II; (1 to 1½ units).*

(b) **Electrodynamics.**—Lectures; collateral reading. Problems from Jean's *Mathematical Theory of Electricity and Magnetism;* the potential theory; spherical harmonics. conjugate functions, and some theorems of the vector analysis; capacities, coefficients of self and mutual induction; theory of absolute electrical measurements and the condenser discharge with its application in wireless telegraphy; Maxwell's theory with some applications in optics, such as the optical properties of metals; modern modifications of Maxwell's theory: the theory of relativity and the electromagnetic emission theory of light. (Continued in the following year in course 132d.)

(c) **Thermodynamics and Kinetic Theory of Matter.**—The two fundamental principles developed and applied to various physical and chemical phenomena, such as elasticity, surface tension, vapor pressure, osmotic pressure, electromotive forces of galvanic cells, etc.; the theory of chemical equilibrium; the Nernst theorem with its application; the direct method of Carnot's cycle together with the method of the thermodynamic potentials and the derived functions; the kinetic theory of gases; the elementary theorems briefly repeated; the phenomena of transfer of mass, momentum and energy; Maxwell's theory of the distribution of velocities in a gas; Boltzman's H theory and the connection between entropy and probability and statistical mechanics; the theory of radiation, Planck's theory of quanta, and the recent applications in specific heat and photoelectricity. Current literature. *I, II; (1 to 2 units).*

(d) **Theory of Electrical Oscillations and Cylindrical Harmonics.**—The conduction of heat and electricity through cylinders and cables leads to

the introduction of cylindrical harmonies of real arguments. Their mathematical properties will be studied. Electrical oscillations along parallel wires, the vibrations from a Wertz oscillator and from antenna, the resonance phenomena between sending and receiving stations, the propagation of electrical waves over the surface of the earth and their absorption will be studied in the first part of the course. Cylindrical and spherical harmonies will then be used for the solution of special problems, such as the resistance and self induction of wires. Applications of cylindrical harmonies will finally be made for phenomena in optics and radiation of light and heat. *Four times a week; I, II; (1 to 2 units).* Not given in 1914-15.]

133. Seminar.—*Three or five times a week; I, II; (1 to 3 units).*
Professor CARMAN and others

SUMMER SESSION COURSES

S 2aI. General Physics, Part I.—Mechanics; the fundamental laws of motion, forces and their effects, and equilibrium. Kimball's *College Physics.* (1½.) Assistant Professor WATSON, Mr. WARNER

Prerequisites: Plane geometry and high-school algebra; registration in Physics S 2b1. Plane trigonometry desired.

S 2bI. Introductory Laboratory Physics, Part I.—A laboratory course in physical measurements on mechanics, properties of matter, etc., to accompany S 2a1. Schulz's *Laboratory Manual.*. (1½.)
Mr. WARNER, Mr. NATHANSON

Prerequisite: Registration in Physics S 2aI.

[**S 2aII. General Physics, Part II.**—Electricity and magnetism. Kimball's *College Physics.* (1½.) Given in 1913; not given in 1914.

Prerequisite: See S 2a1.]

[**S 2bII. Introductory Laboratory Physics, Part II.**—A laboratory course in electricity and magnetism to accompany S 2aII. (1½.) Not given in 1914.

Prerequisite: Registration in S 2aII.]

S 2aIII. General Physics, Part III.—Lectures; experimental demonstrations; recitations. Heat, light and sound. Text: Kimball's *College Physics.* (1½.) Assistant Professor WATSON, Mr. SMITH

Prerequisite: Same as S 2aI.

S 2bIII.—Introductory Laboratory Physics, Part III.—Laboratory; heat, light and sound. Schulz's *Laboratory Manual.* (1½.)
Mr. SMITH, Mr. NATHANSON

Prerequisite: Registration in Physics S 2aIII.

S 4. Electrical and Magnetic Measurements.—Laboratory; recitations; report. (2.) Dr. WILLIAMS

Prerequisite: A course in general physics and calculus.

S 15. Electricity and Magnetism.—Lectures, recitations and laboratory work. Brooks & Poyser, *Magnetism and Electricity.* (1½.) Dr. WILLIAMS

Prerequisite: A course in general physics.

S 16. Heat.—Thermometry, calorimetry, expansion, and vapor pressure. Lectures; demonstrations; recitations; laboratory. Edser's *Heat for Advanced Students.* (1½). Mr. WARNER

Prerequisite: A course in general physics. See instructor in special cases.

S 18. Teachers' Course.—Methods of organizing laboratory work, quizzes and class demonstrations, criticisms of high-school text-books, principles of selecting and ordering apparatus. Laboratory manipulation; glass blowing, minor repairs of apparatus, and preparation of direction sheets. (1).
Assistant Professor Watson, Mr. Smith

Prerequisite: A course in general physics, or teaching experience in physics.

S 31. Special Problems in Advanced Physical Measurements.—Accurate determination of the value of "g" with the pendulum, moments of inertia, calibration of a set of weights, accurate determination of pitch of vibrating bodies, inductance, capacity, and resistance. Watson's *Practical Physics.* (1 or 2.) Assistant Professor Watson, Dr. Williams

Prerequisite: A course in general physics, calculus.

S 131. Investigation of Special Problems.—Intended for students working for advanced degrees. Assistant Professor Watson, Dr. Williams

Prerequisite: Registration in Graduate School. See instructor.

S 133. Seminar and Thesis.—Assistant Professor Watson, Dr. Williams

Prerequisite: Registration in Graduate School.

PHYSIOLOGY

William Edward Burge, Ph.D., *Assistant Professor*
Joseph Howard Beard, A.M., M.D., *Instructor*
Alma Jessie Neill, A.B., *Assistant*

Of the courses outlined below, 1, 2, and 6 are designed primarily for medical students, or for those intending to specialize in physiology; courses 4 and 6 may be taken by students desiring courses in general physiology; courses 3 and 5 are open to seniors in the medical course and 103 to graduate students. The laboratory is equipped for the pursuance of investigation in physiology.

1. Histology—Fundamental mammalian tissues; microscopic anatomy of the organs. Lectures and laboratory. *I;* (5).
Assistant Professor Burge, Dr. Beard

Prerequisite: Two years of university work including five hours in botany or zoology.

2. Experimental Physiology.—Physiology of nerve and muscle; circulation; respiration; secretion; digestion, metabolism. Lectures and laboratory. *II;* (7). Assistant Professor Burge, Dr. Beard

Prerequisite: Physiology 1; Chemistry 15; Physics 7a-7b.

3. Undergraduate Thesis.—(For undergraduates who wish a thesis course.) Assistant Professor Burge

4. General Physiology, Chemical and Experimental.—Lectures, demonstrations, recitations, and laboratory work. *I* or *II;* (5).
Assistant Professor Burge, Dr. Beard

Prerequisite: One semester of university work including five hours in botany or zoology and five hours in chemistry.

5a-5b. Special Physiology.—(For advanced students who wish to take up a special line of work not specified in one of the other courses.) Laboratory; conferences. *I, II;* *(3 hours or more). Assistant Professor BURGE

Prerequisite: The consent of the head of the department.

6. Physiology of the Nervous System and the Senses.—Lectures and laboratory. *II;* (3). Assistant Professor BURGE, Dr. BEARD

Prerequisite: Physiology 4 or registration in Physiology 2.

Course for Graduates

103. Research.—*Once a week; I, II; (1 to 2 units).*
Assistant Professor BURGE

PHYSIOGRAPHY

SUMNER WEBSTER CUSHING, S.B., A.M., *State Normal School, Salem, Massachusetts*

GEORGE WILLIAM HEITKAMP, A.B., *Assistant in Physiography*

S 1. The Surface Features of the Earth.—Origin, development and classification; streams, glaciers, winds and waves; the characteristic land forms produced by each; brief life responses to physiographic features. Primarily for teachers of physiography in high schools. (4.)
Professor CUSHING, Mr. HEITKAMP

S 2. Regional Geography of the United States.—Physiography, climate, and life responses in United States. Open to students who have a general knowledge of elementary physiography. Lectures, maps and readings. (2½.)
Professor CUSHING, Mr. HEITKAMP

S 3. Meteorology.—Circulation of the atmosphere; wind belts; direction of winds, amount of rainfall, and peculiar climatic influences with causes in each case. Conditions which produce abnormalities in the general circulation, rainfall or climate, as monsoons; near and distant mountains; size and shape of land masses; shape of coast lines; ocean currents; cyclones and anticyclones. Weather: making and interpretation of observations; forecasting; causes of normal and abnormal types. Study of specific areas having abnormal climates, such as China, England, Argentina, Alaskan coast, Eastern equatorial Africa, Gulf States of United States, Bengal, Gobi. Lectures and laboratory. (1½.) Mr. HEITKAMP

S 4. Advanced Physiography.—An introduction to physiographic literature. Lectures, conferences, and laboratory, field trips. (1½.)
Professor CUSHING

POLITICAL SCIENCE

(See also ECONOMICS, HISTORY, and SOCIOLOGY)

JAMES WILFORD GARNER, Ph.D., *Professor*

†JOHN ARCHIBALD FAIRLIE, Ph.D., *Professor*

‡WALTER FAIRLEIGH DODD, Ph.D., *Associate Professor*

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*In registering for a course with variable credit hours, a student must put down on his study-list, *not* the possible hours, as shown here, but the number of hours for which *he* intends to take the course; e. g., not *2-5*, but *2*, or *3*, or *4*, or *5*.

†On leave.

‡On leave, second semester.

JOHN MABRY MATHEWS, Ph.D., *Associate*
RUSSELL MCCULLOCH STORY, A.M., *Instructor*
ALFRED CHESTER HANFORD, A.M., *Assistant*

SUMMER SESSION ONLY

THOMAS FRANCIS MORAN, Ph.D., *Purdue University*

Honors

1. A total of 24 hours required for honors in political science may, with the consent of the department, include courses in constitutional history (History 4 and 14), political philosophy (Philosophy 5), or law (not exceeding six hours).

2. One minor must be history, in which courses must be offered aggregating not less than 12 hours. The other minor may be economics, sociology or philosophy, aggregating not less than 9 hours.

3. A reading knowledge of one modern language is advised.

Courses for Undergraduates

Courses 1 and 3 are intended to furnish a general survey of the field of national, state, and local government in the United States, and should be taken by all students who expect to specialize in political science. Course 1A is for the benefit of students in the Colleges of Engineering and Agriculture who may desire an introductory course in American Government, and is open only to such students.

1. American Government.—Historical development, organization, powers, limitations, and practical working of the national government in the United States. *I;* (3). Professor GARNER, Dr. MATHEWS, Mr. STORY

Prerequisite: Thirty hours of university work.

3. State and Local Government.—Powers, obligations, and rights of the states in the Federal Union; formation and admission of states; development of state constitutions; organization of state and local government; political methods. (A continuation of course 1; may be taken independently.) *II;* (3). Professor GARNER, Dr. MATHEWS, Mr. STORY

Prerequisite: Thirty hours of university work.

1a. American Government and Politics.—National, state and local government. (Open only to students in the colleges of Engineering and Agriculture.) *II;* (2). Mr. STORY

Prerequisite: Thirty hours of university work. No credit is allowed for this course if the student has already had or subsequently takes course 1 or 3.

16. Government of Illinois.—Constitutional development, organization and administration of state and local government in Illinois; the legislature; the executive; the judiciary; state officers and institutions; county, town and municipal government. *II;* (2). Mr. STORY

Prerequisite: Thirty hours of university work.

Courses for Advanced Undergraduates and Graduates

(At least junior standing required)

4. Municipal Government.—The growth of cities; municipal organization in the United States; the mayor and the council; commission government;

the city manager plan; a preliminary consideration of municipal functions and the problems of city government. Lectures; assigned readings; reports. *I;* (3). Mr. Story

Prerequisite: One course in political science or Economics 1.

5. Constitutional Law of the United States.—The judicial interpretation of the Constitution of the United States; judicial power to declare laws unconstitutional; separation of governmental powers; relation between state and national government; fundamental rights under the constitutions (due process of law, contract); territories and dependencies; national powers with respect to taxation, commerce; jurisdiction of the United States courts. *I;* (4). Assistant Professor Dodd

Prerequisite: Political Science 1.

6. International Law.—Law of nations; its nature, source, and present status; the doctrine of intervention; the laws of war and peace; the rights and duties of neutrals; the arbitration movement. Lectures, assigned readings and reports. *I;* (3). Professor Garner

Prerequisite: Graduate or senior standing, or junior standing with six hours of history and five hours of political science.

7. American Diplomacy.—Genesis and present organization of the Department of State; the diplomatic service; the treaty making power; the methods and traditional principles of the foreign policy of the United States; the principal diplomatic controversies between the United States and foreign powers; the rise of the United States to the position of a world power. *II;* (3). Dr. Mathews

Prerequisite: Junior standing and Political Science 1 or History 3a-3b.

9. Principles of Jurisprudence.—The nature of law; historical development of the English legal system; English common law in the United States; sources of law and relation between statutes and judicial decisions; brief discussion of the various branches of law (crime, tort, contract, etc.) and their relation to one another. *I;* (3). Assistant Professor Dodd

Prerequisite: Political Science 1 or its equivalent and junior standing.

[**10. Administrative Law in the United States.**—Separation of governmental powers and delegation of legislative power; federal and state administrative organizations; powers of administrative officers; methods of enforcing governmental commands; remedies of the individual against unlawful action of public officials (civil suit, criminal action, mandamus, injunction). *II;* (3). Not given in 1914-15. Assistant Professor Dodd

Prerequisite: Course 5 and at least junior standing.]

[**11. Constitutional Aspects of Social and Industrial Problems.**—The police power for the protection of the public safety, health, and welfare; constitutional limitations upon legislation concerning the public health and safety, the control of public service corporations and combinations of capital, and labor legislation. *II;* (3). Not given in 1914-15. Assistant Professor Dodd

Prerequisite: Senior standing and at least 5 hours in Political Science; Political Science 5, or Economics 12 recommended.]

[**12. National Administration.**—Administrative powers of the President and Congress; executive departments and administrative services of the national government; judicial administration and the relation of the courts to the executive authorities. *II;* (3). Not given in 1914-15. Professor Fairlie

Prerequisite: Political Science 1.]

13. State Administration in the United States.—The administrative position of the governor and the organization of the state administrative departments; state administrative disintegration and the influence of the diffusion of the executive power upon the enforcement of state law; organization and powers of state boards, commissions, and quasi-judicial tribunals; tendencies toward centralization in the administration of taxation, education, and other state functions; methods of control over state administrative officers. *I;* (3). Dr. MATHEWS

Prerequisite: Political Science 3 or its equivalent.

14. Political Parties and Methods.—Development of political parties; party organization and political methods in the United States and Great Britain; recent legislation on primary elections and corrupt practises. *II;* (2). Professor FAIRLIE

Prerequisite: One course in political science.

21. British Government.—Political institutions in the United Kingdom and the British possessions: the Crown; the Cabinet; the House of Commons; the House of Lords; the party system; the courts of law; local government; government in the Crown Colonies and the self-governing colonies; recent developments and proposed changes. *I;* (3). Professor FAIRLIE

Prerequisite: Open only to graduate students and to seniors who have had six hours in political science.

22. Continental European Governments.—The national political systems of France, Germany, Austria-Hungary, Italy, and Switzerland; constitutional beginnings; political organizations; methods of legislation and administration; constitutional guaranties for the protection of individual rights. *II;* (3). Professor GARNER

Prerequisite: Open to graduate students and seniors who have had six hours in political science. History 20a-20b recommended.

28. Problems of Contemporary Politics.—Present day politics, domestic and foreign; the initiative, the referendum, and the recall; proportional representation; state socialism; the immigration problem; electoral reform; ballot reform; judicial reform; parliamentary government; the Monroe Doctrine; international arbitration, etc. Reports by individual members of the class and general discussion. *II;* (2). Professor GARNER

Prerequisite: Senior standing and one course in political science.

34. Municipal Problems.—Municipal administration in the United States and Europe: municipal ownership and regulation of public utilities; police and sanitary administration; city planning and housing; municipal finances. Lectures, readings, and special reports. *II;* (3). Professor FAIRLIE

Prerequisite: Open to graduate students and to undergraduates who have had Political Science 4.

Courses for Graduates

[**101. History of Political Theories.**—Ancient, medieval and modern political thought; political theories of Aristotle, Machiavelli, Hobbes, Locke, Rousseau, Montesquieu, and others; evolution of American political ideas. Given every other year, alternating with course 102. Not given 1914-1915. *Twice a week; I; (1 unit).*] Professor GARNER

102. The Nature of the State.—The principles, methods, and relations of political science; the origin, nature, forms, and functions of the state; sovereignty and liberty; citizenship and nationality; constitutions; principles and methods of political organization. Given in 1914-15 and alternate years, alternating with course 101.) *Twice a week; I; (1 unit).*

Professor GARNER

103. Seminar in Political Science and Public Law.—Special problems; reports; discussions and criticism. The research work of candidates who are writing theses is under the direction of some instructor to whom they report. *I, II.* Members of the department

[105. Special Topics in Constitutional Law.—*Twice a week; II; (1 unit).* Not given in 1914-15.] Assistant Professor DODD

112. Special Topics in Comparative Administration.—Subject for 1914-15: County and Town Government. *Twice a week; II; (1 unit).*

Professor FAIRLIE

SUMMER SESSION COURSES

S 1. Municipal Government.—The growth of cities; municipal organization and functions in the United States; the mayor and the council; commission government; police; light and water supply; city planning; urban transportation; municipal ownership and regulation of public utilities; charities; education. Munro's *The Government of American Cities.* Lectures and assigned reading. (2½). Mr. STORY

S 2. Government of Illinois.—Historical and constitutional development; organization and administration of state and local government; the legislature; the executive; the judiciary; state officers and institutions; county, town, and municipal government. Lectures and assigned readings. (2½).

Mr. STORY

***S 3. The English Government.**—The English Government as it now exists; theoretical and practical prerogatives of the Crown; the origin, composition and fundamental principles of the Cabinet; ministerial responsibility; the origin, composition and functions of the Houses of Parliament; the procedure, sovereignty and privileges of Parliament; and the present trend of British politics; comparisons with the government of the United States and of European countries. The organization of the British Empire and the government of the colonies. (2½.) Professor MORAN

Open to graduates and undergraduates who have had at least one college course in political science or English history.

PSYCHOLOGY

MADISON BENTLEY, Ph.D., *Professor*
CHRISTIAN ALBAN RUCKMICH, Ph.D., *Instructor*
*HOMER BLOSSER REED, Ph.D., *Instructor*
†CARL RAHN, Ph.D., *Instructor*
JOSEPH EDGAR DECAMP, Ph.D., *Assistant*
ANNA SOPHIE ROGERS, A.M., *Graduate Assistant*

*First semester.
†Second semester.

Major and Minor

The major, which consists of 20 hours selected under the advice of the department, may be made up from among any of the courses which follow, excepting 103 and 105. The minor may be made up, with the consent of this department, from one or more of the following subjects: physiology, education, zoology, neurology, philosophy, genetics, sociology, and physics. At least 8 hours must be offered in one minor subject chosen.

Honors

Candidates for honors in psychology must offer:

1. A major group of 20 semester hours. This group is to be made up from courses announced in psychology; except that 6 hours within the group may be chosen from one or more of the following subjects: Philosophy 1, 2, 4; Physics 1, 2a, 2b, 3; Zoology 1, 3, 13, 13a; Animal Husbandry 30. At least 6 of the hours in psychology must be taken in laboratory courses.

2. Two minor groups. These groups are to be selected from subjects which are related to psychology, such as physiology, education, zoology, neurology, philosophy, genetics, sociology, and physics. The constitution of each of the minor groups will be determined by consultation with the department of psychology. Each group must contain at least nine semester hours, and both groups at least twenty-four hours.

Laboratories

The departmental laboratories occupy 23 rooms, including five dark rooms. They make provision for (1) research, (2) undergraduate instruction in drill-courses, (3) demonstrations in the lecture-room, (4) the testing of mental capacity and of mental defect, and (5) the study of the animal mind. The laboratory contains standard equipment and such special pieces as apparatus for spectroscopical problems, for chronoscopic methods, and for studies in memory and association. Provision is made for optical and acoustical experiment. The departmental library contains files of foreign and American journals, and a working collection for experimental and historical studies.

1. **Introduction to Psychology.**—Facts and laws of consciousness; preliminary to all the other work of the department. Lectures; sectional meetings. *I;* (3). Professor Bentley and assistants

Prerequisite: One year of university work.

2. **General Psychology.**—Mental inheritance, habit, custom, and fashion; the relations of psychology to the biological and social sciences; comparative and genetic psychology, and the psychology of the abnormal; application to the arts and professions. *II;* (3). Professor Bentley and assistants

Prerequisite: Psychology 1.

3. **Laboratory Practise (Elementary).**—Classical experiments in the fields of sensation, feeling, attention, and action. A drill course in scientific method. *I* or *II;* (2). Dr. Ruckmich and assistants

Prerequisite: Psychology 1.

4. **Laboratory Practise (Intermediate).**—Experiments in memory, association, learning, and thought. A part of the term may be devoted either to the metrical methods of psychophysics or to the solution of a small qualitative problem. *I* or *II;* (2). Dr. Ruckmich and assistants

Prerequisite: Psychology 1, 3.

5. Comparative Psychology.—Mind in animal forms; the psychological implications of organic evolution; a comparison of human and animal minds; criticism of current literature. (Recommended to students who intend to elect advanced courses either in animal psychology or in the study of behavior.) Lectures and laboratory exercises. *I;* (2). Professor BENTLEY, Dr. REED

Prerequisite: Psychology 1.

6. Comparative Psychology (Advanced Laboratory).—Individual studies in animal psychology. *II;* *(2-4). Professor BENTLEY

Prerequisite: Psychology 1 and 5.

[**7. The Image and Imagination.**—Methods of study; types of imagery. Lectures, reading, and demonstrations. *I;* (2). Not given in 1914-15.

Prerequisite: Psychology 1 and 2.]

[**8. Memory and Association.**—Recollection, recognition, reproduction; forms of the associative consciousness; experimental methods. Lectures, demonstrations, and exercises. *II;* (2). Not given in 1914-15.

Prerequisite: Psychology 1 and 2.]

10. German Reading.—Translation into English of a German psychological text. *I;* (1). Professor BENTLEY

12-13. Minor Problems (Advanced Laboratory).—Methods suitable to new problems; investigations. Studies in the current literature or the presentation of essays upon historical subjects may be substituted for laboratory problems. *I, II;* *(2-5). Professor BENTLEY, Dr. RUCKMICH, Dr. REED

Prerequisite: Psychology 1, 2, 3.

[**15. The Psychological Basis of Music.**—An elementary course. Summary of literature on the origin of music, harmony, melody, rhythm, consonance, tonal quality; psychology of musical appreciation and performance. *II;* (2). Not given in 1914-15.]

17. The History of Psychology.—Lectures and reading. *II;* (2). Dr. RUCKMICH

Prerequisite: Psychology 1, 2, and one other course.

19-20. Systematic Psychology.—Analysis; classification of elementary processes; sensory and imaginal processes and the simpler complexes. Lectures and essays. (For advanced students.) *I, II;* (3). Professor BENTLEY, Dr. RUCKMICH

Courses for Graduates

103. Research.—Theses offered for advanced degrees. *I, II.* Professor BENTLEY, Dr. RUCKMICH

105. Seminar. Current topics considered in their historical setting. *I, II.* Professor BENTLEY

PUBLIC SPEAKING

(See RHETORIC under ENGLISH LANGUAGE AND LITERATURE)

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*In registering for a course with variable credit hours, a student must put down on his study-list, *not* the possible hours, as shown here, but the number of hours for which *he* intends to take the course: e. g., not *2-5*, but *2*, or *3*, or *4*, or *5*.

RAILWAY ENGINEERING

*William Freeman Myrick Goss, M.S., D.Eng., *Director, Professor*
Edward Charles Schmidt, M.E., *Professor*
John McBeath Snodgrass, B.S., *Assistant Professor, Railway Mechanical Engineering*
Alonzo Morris Buck, M.E., *Assistant Professor, Railway Electrical Engineering*
Arthur Francis Comstock, C.E., *Associate, Railway Civil Engineering*
Robert Browder Keller, B.S., *First Assistant, Engineering Experiment Station*
Harold Houghton Dunn, B.S., *Assistant, Engineering Experiment Station*

Railway Civil Engineering—Courses 31-51.
Railway Electrical Engineering—Courses 60-68.
Railway Mechanical Engineering—Courses 1-10.
Common to all groups—Courses 25 and 30.

1. **Locomotives.**—Mechanics and problems relating to operation. Development of types. *I;* (2). Professor Schmidt

Prerequisite: Theoretical and Applied Mechanics 29; Mechanical Engineering 64, 15, 2.

2. **Locomotive Design.**—Calculations and designs of engine and boiler details; current standards and proportions. *I;* (3).
Assistant Professor Snodgrass

Prerequisite: Mechanical Engineering 64, 4, 5, 15, 2; registration in Railway Engineering 1.

3. **Shops and Auxiliary Equipment.**—The design and equipment of railway shops and roundhouses and their organization; water purifying plants; pumping stations; air-brake equipment. *II;* (2).
Assistant Professor Snodgrass

Prerequisite: Mechanical Engineering 64, 4; Chemistry 1a or 1b.

4. **Locomotive Performance.**—Influence of combustion rate, steam pressure, speed; and cut-off; compounding and superheating. *I;* (2).
Assistant Professor Snodgrass

Prerequisite: Theoretical and Applied Mechanics 21; Mechanical Engineering 64, 4, 5, 15, 2.

6. **Locomotives.**—Mechanics; performance; design. *II;* (4).
Professor Schmidt

Prerequisite: Theoretical and Applied Mechanics 21, 29; registration in Mechanical Engineering 12 and 64.

7. **Advanced Design.**—Problems in locomotive and car design. *II;* (3).
Assistant Professor Snodgrass

Prerequisite: Railway Engineering 2.

8. **Dynamometer Car Tests.**—Investigation of train resistance and locomotive tractive effort by the use of the railway test car. Analysis of the results and their application to the problems of tonnage rating. *I;* (2). Mr. Keller

Prerequisite: Open to seniors in railway courses only

*On leave.

9-10. Seminar.—Discussion of current topics and review of railway journals; assigned topics and reports. *I, II;* (1).
Professor SCHMIDT, Assistant Professor SNODGRASS
Prerequisite: Open to seniors in railway courses only.

25. Railway Development.—History and organization of steam and electric railways; statistics; costs. *I;* (3).
Professor SCHMIDT, Assistant Professor SNODGRASS, Assistant Professor BUCK, Mr. COMSTOCK
Prerequisite: Open to juniors in railway courses only.

30. Thesis.—Independent solution of some railway problem or the investigation of some subject. The thesis may consist of an original design or of an original experimental investigation, or it may be the analysis and discussion of facts already in existence. *II;* (3).
Professor SCHMIDT, Assistant Professor SNODGRASS, Assistant Professor BUCK, Mr. COMSTOCK, Mr. KELLER

31. Railway Yards and Terminals.—Theory of design; arrangement of grades in gravity yards; problems. *II;* (3). Mr. COMSTOCK
Prerequisite: Civil Engineering 51.

32. Railway Construction.—Advanced course in design of railway structures; study of cost analysis; preparation of estimates of cost, complete working drawings, and contracts and specifications for assigned problems in design. *II;* (2). Mr. COMSTOCK
Prerequisite: Civil Engineering 51.

33. Economic Theory of Railway Location.—Influence of volume of traffic, alignment, and gradient upon operating expenses; locomotive and grade problems; relocation of existing lines. *I;* (4). Mr. COMSTOCK
Prerequisite: Civil Engineering 51; Theoretical and Applied Mechanics 20, 21.

34. Railway Maintenance.—Systems; track design; standards and charts; classification of accounts; measuring efficiency; emergency organization. *II;* (4). Mr. COMSTOCK
Prerequisite: Civil Engineering 51.

35. Railway Signaling.—Block and route signaling; systems in current use; history of development; study of railway accidents. *I;* (1).
Mr. COMSTOCK
Prerequisite: Civil Engineering 51.

50-51. Seminar.—Current topics; review of railway journals; assigned topics and reports. *I, II;* (1). Mr. COMSTOCK
Prerequisite: Open to seniors in railway courses only.

60. Electric Railway Principles.—Mechanics of traction; train resistance; braking of electric railway trains; methods of solving fundamental electric railway problems. *II;* (2). Assistant Professor BUCK
Prerequisite: Theoretical and Applied Mechanics 25; Electrical Engineering 25, 22.

61. Electric Traction.—Selection and operation of equipment. A condensed course for students in railway mechanical engineering or other engineering departments. *II;* (3). Assistant Professor BUCK
Prerequisite: Theoretical and Applied Mechanics 21; Electrical Engineering 11, 62, or 25, 22.

63. **Electric Railway Laboratory.**—Tests of electrical machinery used in railway service; work with the electric and steam railway test cars to determine train resistance and power consumption. *II;* (3).
Assistant Professor Buck
Prerequisite: Railway Engineering 64; Electrical Engineering 24.

64. **Electric Railway Practise.**—Types of equipment; energy consumption; methods of distribution. *I;* (3). Assistant Professor Buck
Prerequisite: Theoretical and Applied Mechanics 25; Electrical Engineering 5, 23.

65. **Electric Railway Economics.**—Location and operation; choice of systems; location of power plant and sub-stations; calculation of transmission and distribution of circuits; maintenance of way and of equipment; electrification of steam roads. *II;* (3). Assistant Professor Buck
Prerequisite: Railway Engineering 64.

67-68. **Seminar.**—Current topics; review of railway journals; assigned topics and reports. *I, II;* (1). Assistant Professor Buck
Prerequisite: Open to seniors in railway courses only.

Courses for Graduates

Entrance upon graduate work in railway engineering presupposes the full undergraduate course in that subject.

102. **Locomotive Design.**—Modern practise concerning steam pressure, compounding, superheating. Professor Goss

106. **Locomotive Operation.**—Train resistance and tractive effort; tonnage ratings. Professor Schmidt

108. **Electric Railway Practise.**—The design, selection, operation, and maintenance of equipment; central station, sub-station, rolling stock and line equipment. Assistant Professor Buck

110. **Railway Location.**—The effects of location upon earning capacity; problems in original location, in the relocation and reduction of grades of existing lines. Mr. Comstock

RHETORIC

(See English.)

ROMANCE LANGUAGES AND LITERATURE*

Thomas Edward Oliver, Ph.D., *Professor*
David Hobart Carnahan, Ph.D., *Associate Professor*
John Driscoll Fitz-Gerald, II., Ph.D., *Assistant Professor*
David Simon Blondheim, Ph.D., *Assistant Professor*
Arthur Romeyn Seymour, Ph.D., *Associate*
Olin Harris Moore, Ph.D., *Instructor*
Thor Griffith Wesenberg, A.M., *Assistant*
Conrad Joseph Eppels, *Assistant*
Charles Serophin Carry, *Assistant*
Louis Allen, A.B., *Assistant*
James Kessler, A.B., *Assistant*
Rafael Soto, B.S., *Assistant*

*The department is administered by the following committee: Associate Professor D. H. Carnahan, Chairman, Professor Thomas E. Oliver, Assistant Professor John D. Fitz-Gerald.

A major in French or Romance Languages consists of 20 hours chosen from the courses announced below except French 1a and 1b, 2c and 2d, and 9a and 9b, and Spanish 1a and 1b.

A minor for students taking a major in French or Romance Languages must include at least 8 hours of Latin in addition to 3 years of high school Latin. The remaining 12 hours may be chosen from not more than two of the following subjects: education; English, excluding 1a and 1b, and Rhetoric 1 and 2; German, excluding German 1, 2, and 3; history; Italian; philosophy; and Spanish, excluding 1a and 1b.

Honors: Candidates for honors in French must offer:

1. A major in French.

2. At least 12 hours in Latin, in addition to three years of high school Latin.

3. At least ten hours in one of the following subjects: German, excluding German 1, 2, and 3; Spanish, excluding Spanish 1a and 1b; Italian; English literature, excluding English 1 and 2; history; and philosophy.

A. FRENCH

Courses for Undergraduates

1a-1b. Elementary Course.—Grammar; pronounciation; reading of simple modern authors; composition; conversation. *I, II;* (4).
Professor Oliver, Associate Professor Carnahan, and others

Prerequisite for 1b: One year of high school French, or French 1a, or French S1.

2a-2b. Modern Prose, Poetry, and Drama.—Rapid reading of modern authors; advanced syntax and composition. *I, II;* (4).
Professor Oliver, Associate Professor Carnahan, and others

Prerequisite: French 1a, 1b.

2c-2d. Second-Year Conversation.—Classroom work. (Does not count toward a major in French.) *I, II;* (1). Mr. Eppels

Prerequisite: French 1a, 1b, with a grade of at least 85; registration in French 2a, 2b.

3a-3b. Intermediate Prose Composition and Conversation.—Conducted in French. Reading; themes; talks upon France and French life. *I, II;* (2).
Mr. Carry

Prerequisite: French 2a-2b.

Note—This course is required of those who are given the recommendation of the department to teach French.

[**4a-4b. Advanced Composition.**—*I, II;* (2). Not given in 1914-15.]

9a-9b. Masterpieces of Romance Literatures in English Translations.—Dante, Petrarch, Boccaccio, Cellini, Machiavelli, Ariosto, Tasso, Lazarillo de Tormes, Calderon, Cervantes, Moliere, etc. (This course may not be counted toward a major in French.) *I, II;* (2). Dr. Moore

Prerequisite: Two years of university work.

22a-22b. Modern Novel and Drama.—From the beginning of the nineteenth century to the present time. Lectures; reports on collateral reading. *I, II;* (3). Assistant Professor Fitz-Gerald

Prerequisite: French 2a-2b.

25. Course for Teachers.—Methods of teaching French in this country and abroad; class-room problems. *I;* (2). Associate Professor CARNAHAN
Prerequisite: Twenty-four hours' credit in French.

28a-28b. Senior Thesis.—Primarily for candidates for honors in French, but open to other seniors. *I, II;* (1).
Associate Professor CARNAHAN, and members of the staff

Courses for Advanced Undergraduates and Graduates

10a-10b. Survey of French Literature.—Special periods and authors. *I, II;* (3). Associate Professor CARNAHAN
Prerequisite: French 22a-22b, or 24a-24b.

[23a-23b. Modern French Poetry.—*I, II;* (3). Not given in 1914-15.]

24a-24b.—Seventeenth and Eighteenth Century Dramatists.—Corneille, Racine, Moliere, Voltaire, Marivaux, Sedaine, Beaumarchais. Lectures and interpretation of the great masterpieces. *I, II;* (2). Professor OLIVER
Prerequisite: French 2a-2b.

26a-26b. French Literary Criticism.—History of criticism in antiquity and in the Italian Renaissance; the principal French critics; the development of classicism and romanticism in the seventeenth and nineteenth centuries. *I, II;* (2). Assistant Professor BLONDHEIM
Prerequisite: Three years of French.

Courses for Graduates

Before entering upon the study of Romance languages for an advanced degree, the candidate must have had a total of at least thirty hours of college work in these languages. Eighteen of these hours must be in one of these three languages, French, Italian, or Spanish, but no candidate will be received who has not had at least twelve hours in French. In addition a candidate must have had satisfactory training in Latin, and be able to read ordinary German prose.

102. Old French Lyric and Prose Literature.—Critical interpretation of the earlier Old French dramatists, didactic, chronicle and lyric writers. The history of these types of medieval literature. For students who prefer it, the collateral work may consist of the elements of Old French historical grammar. *Twice a week; I, II; (1 unit).* Professor OLIVER

103. Seventeenth Century Prose Writers.—Lectures on French culture, society and prose literature of the seventeenth century. The great preachers and moralists. Jansenism and Port Royal. The formation of the classic ideals. Collateral readings of the greater masterpieces, with assigned problems for special investigations. *Once a week; I, II; (½ unit).*

106. Early French Drama.—Origins of the French drama; its development up to the Renaissance. *Twice a week; I, II; (1 unit).*
Associate Professor CARNAHAN

110. Old French Phonology and Morphology.—Development of Old French from Vulgar Latin. *Twice a week; I, II; (1 unit)*
Assistant Professor BLONDHEIM

125. Seminar.—Research work in preparation for theses in the field of the Romance languages. *Twice a week; I, II; (1 unit).*
Professor OLIVER, and other members of the department

B. ITALIAN

[1a-1b. Elementary Course.—*I, II;* (3). Not given in 1914-15.]

Course for Advanced Undergraduates and Graduates

2a-2b. Italian Literature.—First Semester: Rapid reading from the works of Italian writers of the nineteenth century. Second semester: Selections from Dante, Petrarch, and Boccaccio. *I, II;* (2). Dr. Moore

Prerequisite: Italian 1a-1b.

C. SPANISH

Courses for Undergraduates

1a-1b. Elementary Course.—Grammar; pronunciation; easy reading; composition; conversation. *I, II;* (4).

Dr. Seymour, Mr. Wesenberg, Mr. Soto

2a-2b. Conversation and Composition.—Conversation; composition; reading of modern prose. The vocabulary of everyday life is emphasized. Commercial correspondence. *I, II;* (3). Dr. Seymour

Prerequisite: Spanish 1a, 1b.

3a-3b. Introduction to Spanish Literature.—Rapid reading of works of representative modern authors. *I, II;* (2). Assistant Professor Fitz-Gerald

Prerequisite: Spanish 1a, 1b.

4a-4b. Advanced Conversation and Composition.—Commercial correspondence; reading of commercial Spanish. (Conducted in Spanish.) *I, II;* (2). Dr. Seymour

Prerequisite: Spanish 2a, 2b.

Courses for Advanced Undergraduates and Graduates

11-12. The Spanish Drama of the Sixteenth and Seventeenth Centuries.—Earlier dramatists; plays of Lope de Vega, Calderon, Ruiz de Alarcón, and Tirso de Molina. Reports on plays read outside of class. *I, II;* (2). Dr. Seymour

Prerequisite: Spanish 3a, 3b.

[15. Survey of Spanish Literature.—*II;* (2). Not given in 1914-15.]

Courses for Graduates

131. Oldest Monuments of the Spanish Language; Origins of Spanish Poetry.—Historical grammar and paleography; critical interpretation of texts. *Twice a week; I, II; (1 unit).* Assistant Professor Fitz-Gerald

133. Origins of the Spanish Novela and Comedia.—Spanish prose fiction drama previous to the Golden Age. *Twice a week; I, II; (1 unit).*

Assistant Professor Fitz-Gerald

134. The Spanish Ballad.—Types of the ballad; lectures; collateral reading; reports. *Twice a week; I, II; (1 unit).* Dr. Seymour

SUMMER SESSION COURSES

S 1. Elementary Course.—Pronunciation, grammar, composition, reading. Giese's *Graded French Method.* (4). Mr. Carry

S 1a. Elementary Course (continued).—(2-4).
Professor Oliver and Mr. Carry

Prerequisite: French 1 (Elementary French, first semester), S1, or one year of high-school French.

S 2. Modern French.—Rapid reading; composition; conversation. Comfort's *French Prose Composition;* Loti's *Pêcheur d'Islande;* Lesage's *Gil Blas;* Erckman-Chatrian's *Le Juif Polonais;* Bazin's *Les Oberlé;* Hugo's *Ruy Blas;* Rostand's *Cyrano de Bergerac.* (2). Professor Oliver

Prerequisite: One year of university French or its equivalent.

S 4. Composition and Conversation.—Composition; conversation; life and customs of the French people. Talbot's *Le Francois et sa patrie.* (1).
Mr. Carry

Prerequisite: The approval of the instructor.

S 24. Moliere.—Life and times; study and interpretation of his masterpieces. Lectures; collateral reading; essays. (1 or more.) Professor Oliver

Prerequisite: Two years of university French or an equivalent.

S 100. Seminar.—Graduate work for properly qualified students.
Professor Oliver

SCANDINAVIAN LANGUAGES AND LITERATURE

(See Germanic Languages and Literature.)

THE SOCIAL SCIENCES

(See Economics, History, Political Science, and Sociology.)

SOCIOLOGY

Edward Cary Hayes, Ph.D., *Professor*

Henry Horace Hibbs, Jr., A.M., *Assistant*

SUMMER SESSION ONLY

Ulysses Grant Weatherly, Ph.D., *Indiana University*

Honors

For honors in sociology twenty-four hours in the major subject are required, including Sociology 1, 3, 8, and 9.

The minor subjects may be selected, with the approval of this department, from the following: history, economics, political science, philosophy, and psychology.

Courses for Undergraduates

1. The Principles of Sociology and Their Application to Present Problems.—*I;* (3). Professor Hayes

Prerequisite: Junior standing, including if possible the principles of economics and elementary psychology.

7. The Social Problems of the Rural Community.—*II;* (2).
Professor Hayes

Prerequisite: Junior standing.

Courses for Advanced Undergraduates and Graduates

3. Social Evolution.—Modes of social activity among people at different stages of progress; savage, barbarous, and civilized; family organization, practical arts, economic wants and institutions, origins of government and law, codes of morality, religions; inductions from such facts, as to the theory of social evolution and the method of progress. *II;* (3). Professor Hayes

Prerequisite: Sociology 1.

8. General Charities.—Evolution of modern organized philanthropy, public and private; causes and prevention of poverty; organization and management of charitable institutions. *I;* (3). Mr. Hibbs

Prerequisite: Junior standing and Sociology 1 or Economics 1.

9. Criminology.—Nature, causes, and treatment of the criminal; evolution of modern methods of criminal procedure and penology; recent experiments and tendencies. *II;* (3). Mr. Hibbs

Prerequisite: Senior standing, or Sociology 8.

10. Problems of Population.—Immigration; race problems; conditions affecting public health; influences affecting the population type; eugenics; theories and policies of population. *I;* (3). Mr. Hibbs

Prerequisite: Senior standing and Sociology 1, or Economics 1.

11. Principles of Sociology.—Fundamental principles and main teachings of sociology, with practical applications. *I;* (3). Professor Hayes

Prerequisite: Senior standing.

12. The Labor Problem.—The same as Economics 12.

Prerequisite: Economics 1, 3; students whose major subject is sociology and who have had 6 hours in history, and Sociology 1, may be admitted without Economics 3.

14. Social Statistics.—Social investigation and research. Social and community surveys. The verification of sociological laws and principles by means of the statistical method. The study of vital statistics and population in the light of data afforded by official publications and special investigations. The statistical method applied to the study of social problems. *II;* (3). Mr. Hibbs

Prerequisite: Sociology 1 or 11; or Economics 1, and, except in special cases, Sociology 8 or 10.

[**15. The Family.**—Evolution of the family and marriage; educational, moral, and political significance at different stages of social development. *II;* (3). Not given in 1914-15.]

21. Socialism and Social Reform.—The same as Economics 21.

Prerequisite: Economics 1, 3; students whose major subject is sociology and who have had 6 hours in history, and Sociology 1, may be admitted without Economics 3.

[**20. Social Education.**—Education as a factor in social progress; present day educational policy and organizations in the light of theoretical and applied sociology. *II;* (3). Not given in 1914-15.

Prerequisite: Senior standing, and Sociology 1 or Psychology 1.]

Courses for Graduates

Preparation for graduate work in sociology must include at least the equivalent of twelve semester hours in the social sciences, of which at least three must

be in sociology, and three in the principles of economics. The remainder may be in any combination of these two subjects, or of history and political science.

The courses open to graduate students in this department are of two classes. Those of the first class deal with the principles of general sociology; these principles relate to the essential nature of customs, institutions, and other forms of social activity, the correlations between them, the types of causes by which they are affected, and the method by which they are evolved, all of which apply equally to the forms of social activity whether they are employed in the service of economic, political, or other purposes. The courses of the second class treat, in the light of the principles of general sociology, the practical social problems of the present.

The library has most of the standard works in sociology by American, English, and European authorities, a large collection of books on various sociological problems, and an extensive list of periodicals. Special attention is given to ethnographic and anthropologic materials.

[101. Sociological Method.—The method of advancing the science, adaptability to sociological investigation of certain methods described in Pearson's *Grammar of Science,* Wundt's *Methodenlehre,* zweite abtheilung,, Seignobos' *La Méthode Historique Appliquèe aux Sciences Sociales,* Bernheim's *Historische Methode,* Spencer's *Study of Sociology,* and Giddings' *Inductive Sociology. Three times a week; I; (1 unit).* Not given, 1914-15.]

102. The Development of Sociology.—Readings in the works of writers who have contributed most to the development of sociology; discussions; supplementary lectures. *Twice a week; I, II; (1 unit).* Professor Hayes

150. Seminar.—*Three to six hours a week; I, II; (1 or 2 units).*
Professor Hayes, Mr. Hibbs

SUMMER SESSION COURSES

S 1. Principles of Sociology.—Lectures; discussions; assigned reading. (2). Professor Weatherly

*S 10.—Population.—Malthus' "Principle" and its critics; problems of American population; immigration, race mixture, conditions affecting public health, death-rate, birth-rate, "race-suicide," marriage, and divorce; selective influences at work on the "population type." (2). Professor Weatherly

*S 3. Social Evolution.—Comparative study of modes of social activity among people at different stages of progress, savage, barbarous and civilized; family organization, practical arts, economic wants and institutions, origins of government and law, codes of morality, religions; inductions from such facts as to the theory of social evolution and the method of progress. (1).
Professor Weatherly

SPANISH

(See Romance Languages and Literature)

VETERINARY SCIENCE

Donald McIntosh, V.S., *Professor*

4. Anatomy, Physiology, and Diseases of Domestic Animals.—The organs of mastication, digestion, respiration; circulation, and lymphatic system; the urinary organs; the skin. *I;* (5). Professor McIntosh

5. Anatomy, Physiology, and Diseases of Domestic Animals.—The nervous system, bones, joints, feet, eye, and generative organs; epizootic and contagious diseases; catarrhal fever; pyemia; septicaemia; rheumatism; tuberculosis; fistula of the withers; poll-evil; wounds; internal parasites. *II;* (5).
Professor McIntosh

6. Clinic.—The free clinic is held every Saturday morning from ten to twelve o'clock. Animals are examined, operated upon, and prescribed for. This class is of benefit to the student as he has the opportunity of seeing the cases and assisting in the work. *I, II;* (1). Professor McIntosh

Prerequisite: Registration in Veterinary Science 4 and 5.

ZOOLOGY

Henry Baldwin Ward, Ph.D., *Professor*
John Sterling Kingsley, D.Sc., *Professor*
Frank Smith, A.M., *Professor*
Charles Zeleny, Ph.D., *Associate Professor*
Victor Ernest Shelford, Ph.D., *Assistant Professor*
Harley Jones VanCleave, Ph.D., *Instructor*
Henry Gustav May, B.S., *Research Assistant*
Bessie Rose Green, A.M., *Assistant*
Ralph Harlan Linkins, A.M., *Assistant*
Harry Virl Heimburger, A.B., *Assistant*
Homer Eldon Chenoweth, A.B., *Graduate Assistant*
Harriet Bell Merrill, M.S., *Graduate Assistant*
Jesse LeRoy Conel, A.M., *Graduate Assistant*
Thomas Byrd Magath, M.S., *Graduate Assistant*
George Marsh Higgins, B.S., *Graduate Assistant*
Herbert Edmond Metcalf, B.S., *Graduate Assistant*
Rachel Baumgartner, A.B., *Graduate Assistant*
Charles West Redwood, *Scientific Artist*

SUMMER SESSION ONLY

Franklin Davis Barker, Ph.D., *University of Nebraska*
Wales Harrison Packard, Ph.D., *Bradley Polytechnic Institute*

Courses 1 and 2 constitute a survey of the subject, extending through the year and forming an introduction to later work. In the second year, a student may choose as a line of work either morphological, experimental, ecological, faunistic, or systematic courses. The courses on microscopical technique (3), heredity and evolution (5), and current literature (20), are of value for all students. Medical students should take courses 3 and 6 the second year. Those preparing to teach zoology in the high school will find invertebrate morphology (4), field zoology (16, 17), and ecology (9, 11), of value, and should not overlook the importance of a course in general entomology.

Courses for Undergraduates

1. General Zoology.—Animal biology; structure; function and interrelations of animal forms; origin and development of animal life; the simpler and best established generalizations in zoological theory. Lectures; laboratory; quiz work. *I* or *II;* (5).
Professor Ward, Assistant Professor Shelford, Dr. VanCleave, and assistants

2. Vertebrate Zoology and Comparative Anatomy.—Classification of the Chordata; the early stages of vertebrate embryology; vertebrate tissues; systems of organs considered in respect to their anatomy, function, ontogeny, and evolution in the vertebrate series; anatomical studies of types of the Chordata. Lectures; laboratory; quiz work. *II;* (5).

Professor KINGSLEY and assistants

Prerequisite: Zoology 1.

4. Invertebrate Morphology.—Laboratory; lectures; demonstrations; invertebrate structure and development. *II;* (3). Dr. VANCLEAVE

Prerequisite: Zoology 1.

5. Heredity and Evolution.—(a) Facts and present views. (b) The proofs of organic evolution; a discussion of the probable factors involved. Lectures; demonstrations; assigned reading. *II;* (2).

Associate Professor ZELENY

Prerequisite: One year of university work.

16. Field Ornithology.—The birds of the vicinity. Identification; food relations; seasonal distribution; migration activities. (Students are advised to provide themselves with opera or field glasses.) Field work; lectures. *II;* (2).

Professor SMITH and assistant

19a-19b. Advanced Ornithology.—(Continuation of 16.) Difficult groups of birds; economic and technical literature. *I, II;* *(2 to 5). Professor SMITH

Prerequisite: Zoology 16 or equivalent.

Courses for Advanced Undergraduates and Graduates

3. Microscopical Technique and General Vertebrate Embryology.—Vertebrate embryo in early stages of development; methods of fixation, embedding, section cutting, staining and mounting; preparation of material for use in introductory embryology. Lectures; laboratory. *I;* (3).

Professor KINGSLEY and assistant

Prerequisite: Zoology 1, 2.

6. Vertebrate Organogeny.—Development of the organs of the vertebrate body. Lectures; assigned readings, laboratory studies on embryos of the chick, dogfish, Amblystoma, and pig. (A continuation of course 3; for medical students and others.) *II;* (3). Professor KINGSLEY and assistant

Prerequisite: Zoology 1, 2, 3.

9. Animal Ecology.—The relation of animals to their environment; processes of changes in environment and their influence upon animal life; the local fauna and the conditions under which it lives; methods of observation and making notes. Arthropods, mollusks, reptiles, amphibians, and fishes. Lectures; field work; laboratory, and assigned reading. *II;* (3).

Assistant Professor SHELFORD

Prerequisite: One year of zoology, or two years of university work, including Zoology 1.

11. Animal Ecology and Geography.—(Experimental Course.) The physiology of environic relations; facts, principles, and methods of analysis of behavior. The world and regional aspects of animal behavior and ecology;

*In registering for a course with variable credit hours, a student must put down on his study-list, *not* the possible hours, as shown here, but the number of hours for which *he* intends to take the course; e. g., not *2-5*, but *2*, or *5*, or *4*, or *5*.

including animal distribution as related to climate and vegetation and some consideration of its origin and its dynamic relations. Lectures; laboratory work; field excursions. *I;* (5). Assistant Professor SHELFORD

Prerequisite: Two years of university work; including Zoology 1 and 9.

13. Experimental Embryology and Regeneration.—Lectures; demonstrations. *I;* (2). Associate Professor ZELENY

Prerequisite: Three years of university work, including one year in zoological courses.

14a-14b. Experimental Embryology and Regeneration.—(Laboratory.) Individual work. *I, II;* *(2 to 5). Associate Professor ZELENY

Prerequisite: Three years of university work, including one year in zoological courses.

15. Variation and Heredity.—The factors of organic evolution; animal breeding; eugenics. Lectures and demonstrations. *II;* (2). Associate Professor ZELENY

Prerequisite: Three years of university work, including one year in zoological courses.

15a-15b. Variation and Heredity.—(Laboratory.)—Individual work. *I, II;* *(2 to 5). Associate Professor ZELENY

Prerequisite: Three years of university work, including one year in zoological courses.

17. Field Zoology.—Collection, preservation, and identification of common representatives of the lower vertebrates and of land and fresh-water invertebrates (excluding insects) in the vicinity; identification work on living and preserved material from some of the larger rivers and lakes. Habits and life histories of selected forms. Field and laboratory work; assigned readings. *I;* (4). Professor SMITH and assistant

Prerequisite: One year in zoology, and senior standing.

18. Advanced Field Zoology.—More restricted problems in connection with the local fauna; taxonomic or distributional problems. (A continuation of course 17.) *II;* *(3 to 5). Professor SMITH

Prerequisite: Zoology 17, or equivalent.

22-23. Morphology of Vertebrates.—The skeleton and the brain, the cranial nerves, and the eye and ear. Lectures; laboratory work; dissection of types. *I, II;* (4). Professor KINGSLEY

Prerequisite: Zoology 1, 2, 3 and 6.

21a-21b. Introduction to Zoological Research.—Investigation of topics, usually repeating the work of earlier investigators; the morphology, life history, or reciprocal relations of invertebrate forms Laboratory; conferences; assigned reading. *I, II;* *(2 to 5). Professor WARD

Prerequisite: One year in zoological courses, and senior standing.

20a-20b. Current Literature.—Meetings of the instructors and advanced students of the department for the presentation and discussion of the results of

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*In registering for a course with variable credit hours, a student must put down on his study-list, *not* the possible hours, as shown here, but the number of hours for which *he* intends to take the course; e. g., not *2-5*, but *2*, or *3*, or *4*, or *5*.

recent zoological investigation. (Open to all students of zoology; should be taken by those intending to graduate with a thesis.) *I, II;* (1).

Associate Professor ZELENY

Prerequisite: Three years of university work, including one year in zoology.

8a-8b. **Thesis Investigation.**—Individual work on assigned topics. *I, II;* (5).

Professor WARD, Professor KINGSLEY, Professor SMITH, Associate Professor ZELENY, Assistant Professor SHELFORD

Prerequisite: Two years in zoological courses.

Courses for Graduates

Two years of undergraduate work in zoology are ordinarily presupposed for entering upon graduate study in the department. When the work is chosen for a minor the courses listed for graduates and undergraduates, to be acceptable, must be preceded by at least one full year's undergraduate work in zoology. Work done at other institutions will be valued on conference with the head of the department.

102. **Selected Topics from Vertebrate Morphology.**—The origin of vertebrates, the segmentation of the head, the morphology of special systems. *Twice a week; I; (½ unit).* Professor KINGSLEY

107. **Parasitology.**—Animal parasites; their relations to disease; origin and biological significance of parasitism. Conferences; assigned readings; demonstrations. *Twice a week; I, II; (1 unit).* Given in 1914-15 and in alternate years. Professor WARD

109. **Animal Response.**—Animal behavior; the regulatory mechanisms of organisms—neutrality, osmotic pressure, immunity, and temperature, considered in relation to natural environments. *Twice a week; II; (1 unit).*

Assistant Professor SHELFORD

113. **Experimental Zoology.**—Experimental embryology, regeneration, variation, and heredity. *Two to five times a week; I, II; (1 to 2 units).*

Associate Professor ZELENY

117. **Faunistic Zoology.**—Taxonomy, distribution, and ecology; field work, conference, and lectures. Students have the advantage of the collections, library, apparatus, and operation of the State Natural History Survey. *Twice a week; I, II; (1 to 2 units).* Professor SMITH

121. **Individual Research Courses.**—

(a) ZOOLOGICAL PROBLEMS — Professor WARD
(b) FAUNISTIC AND SYSTEMATIC ZOOLOGY — Professor SMITH
(c) ANIMAL ECOLOGY AND BEHAVIOR — Assistant Professor SHELFORD
(d) VERTEBRATE MORPHOLOGY — Professor KINGSLEY
(e) EXPERIMENTAL ZOOLOGY — Assistant Professor ZELENY

[127. **Theories of Animal Phylogeny.**—Relations of animal groups; signification of so-called intermediate forms; invertebrate larval forms and of theories of descent based on them. Lectures; assigned readings; laboratory. *I, II; (1 unit).* Not given in 1914-15. To be given in 1915-16.]

Professor WARD

SUMMER SESSION COURSES

Courses for Undergraduates

S 1. General Zoology.—Living matter, functional activities of animals, geographical distribution of animals, evolution, heredity. (5).

Professor BARKER and Dr. PACKARD

S 19. Teachers' Course.—For present and prospective teachers of geology, especially in high schools. Training and preparation; a uniform high-school course in zoology; the correlation of class-room and laboratory work; the organization of class and laboratory work; critique of text-books and laboratory manuals; field work in zoology; the making of laboratory apparatus; collection of materials for demonstration and laboratory use. (1.)

Professor BARKER

Prerequisite: Open to teachers of zoology, to those having had a course in zoology, and to those taking the course in General Zoology.

S 7. Human Biology.—Structure, functions, and hygiene of the human body. For teachers of high-school biology and physiology. The effects of drugs and narcotics; the development of man; heredity; eugenics. Laboratory. (3.)

Dr. PACKARD

Course for Graduates and Advanced Undergraduates

***S 21. Introduction to Zoological Research.**—Morphology, life history, or reciprocal relations of invertebrate forms. Laboratory; conferences; assigned reading.

Professor BARKER

Prerequisite: One year of college work in zoology.

PART IV
UNIVERSITY EXTENSION

UNIVERSITY EXTENSION

Extension work has not been organized as a separate administrative unit in the University of Illinois. Several departments, however, have initiated activities, both on the campus and in the State at large, which serve to make some of the facilities of the University available to groups of mature persons who are engaged in various industries and professions.

AGRICULTURE

Each of the departments of the College of Agriculture does extension work and so far as possible provides special men for this purpose. In addition to this, a separate Department of Agricultural Extension conducts extension enterprises that do not deal with technical subjects, and cooperates with the other departments in projecting their work in the State.

Some of these more general extension enterprises are:

(1) A two-weeks "Short Course," known as the Corn Growers' and Stockmen's Convention, held annually at the College of Agriculture since 1898. The enrollment in this course in 1914 was 1065. The work includes lectures, conferences, and demonstrations in the subjects of stock-judging, milk-testing, farm mechanics, and farm crops. (Omitted in 1915, on account of the "foot and mouth disease.")

(2) Agricultural-extension schools of a week's duration—about thirty held in different parts of the State during 1914-15.

(3) Demonstrations held in connection with soil-fertility and crop fields throughout the State.

(4) Cooperation, by furnishing teachers and lecturers with other educational agencies for rural communities, e. g., farmers' institutes, special lecture railway trains, the Boys' State Fair School, etc.

(5) Educational exhibits at fairs and expositions.

(6) School and community excursions to the University.

For the courses in the theory and practise of agricultural-extension work offered in the College of Agriculture, see under "Agricultural Extension" in the General Description of Courses, Part III.

Under the provisions of the Smith-Lever Act, approved by the President of the United States on May 8, 1914, the University of Illinois has undertaken the following additional extension activities in conjunction with the United States Department of Agriculture:

(1) Cooperation with county farm bureaus in the employment of agricultural advisers.

(2) Cooperation with local associations in home-economics demonstrations.

(3) Employment of extension specialists in agriculture and home economics as special advisers in the field.

(4) Cooperation with the United States Department of Agriculture in its extension activities.

BUSINESS

The University offered, during the week of February 1-6, 1915, at Urbana, a short course for business men, designed to meet the needs of both employer and employee.

Instruction was given by the regular members of the University staff of the Courses in Business Administration, assisted by members of allied departments. Among the subjects treated were: commercial law, banking, railroad rates, railroad claims, credits and collections, accountancy, advertising, salesmanship, problems in the administration of charity, and insurance. A part of each instruction period was devoted to the discussion of problems that business men particularly are called on to solve. This method was intended to bring to the attention of the members of the different classes the best practices in their respective businesses. There were also lectures of a more general nature on municipal finances, local utilities, tax reform, and business methods in public institutions. There were no entrance requirements for this course, and no fees were charged.

CERAMICS

Besides offering two four-year technical courses, the department of ceramics cooperates with the clay and allied industries by offering annually, at Urbana, during the second and third weeks in January, a two-weeks industrial course in the principles underlying the manufacture of clay products, for those who have not the time nor the preparation required for academic studies. The work includes lectures, laboratory work, practise in firing kilns, and informal gatherings for question-asking. A common-school education is sufficient to enable one to do the work of this course. No charge of any kind is made. The number enrolled in January, 1914, was 51.

EDUCATION

Model and Demonstration Teachers' Institute

In co-operation with the county superintendents of Champaign and Piatt Counties, the department of education held at the University, during the week of August 3, 1914, a model and demonstration teachers' institute. A report of this institute has been published as a bulletin of the School of Education.

Extension Lectures

At the invitation of school authorities of Belleville, Champaign, Danville, Springfield, and Urbana, members of the department of education have, during 1914, given series of from four to eight lectures to the teachers of these cities. In other cities one or two lectures are given each year. The four members of the department delivered during 1914 about one hundred lectures before Illinois audiences.

HIGHWAY ENGINEERING

In January, 1914, the department of civil engineering offered a two-weeks course in highway engineering, primarily for the county superintendents of highways, then recently appointed under the Tice road law. One hundred

ninety-one persons, including sixty-three of the sixty-six county superintendents then appointed, were enrolled. Addresses were made by members of the technical staff of the State Highway Commission, members of the staff of the department of civil engineering of the University, the state engineers of several adjoining states, and other prominent engineers.

A similar but more advanced course was planned for January, 1915, but was given up for the year, at the request of the State Highway Commission, and on the advice of the State Veterinarian, on account of the "foot-and-mouth disease".

HOUSEHOLD SCIENCE

The Department of Household Science has a staff of seven extension workers, whose activities include the following:

1. **Correspondence.**—Numerous requests come from individuals and clubs for help in solving some problem of preparing food, planning a house, or feeding a child, or in preparing topics for club study. All such requests receive careful attention.

2. **Farmers' Institutes.**—By arrangement with the Illinois Farmers' Institute a representative of the department is sent to the county farmers' institute in each of the 102 counties of the State, if desired.

3. **The School for Housekeepers.**—This is held annually, at Urbana, during the last two weeks in January. It offers instruction in food, clothing, and shelter, and provides an opportunity for the discussion of some of the fundamental problems of home life and management. The attendance has increased during the past six years from 45 to 480. No fees are charged in connection with this school.

4. **Extension Courses.**—Two such courses, one in cooking, and one in sewing, are offered at Urbana for four weeks immediately following the two-weeks School for Housekeepers, thus affording six weeks' instruction in all. The number who may be accommodated in this course is limited, and people are received in the order of their application. No fees are charged in these courses.

5. **Movable Schools.**—The department of household science will, so far as possible, provide instruction on request for a movable school in any community which is sufficiently interested to pay the local expenses (hire of hall, etc.) and the traveling expenses and living expenses for the week of either one instructor or two instructors. During the year 1914 eight two-instructor and twelve one-instructor movable schools were held in different parts of the State. The enrollment in these schools aggregated 1,640 students.

The following are the programs offered during the year 1914-15 in one-instructor and two-instructor schools respectively:

Program for Movable School with One Instructor

Monday	2:00— 3:30	Talk and Discussion—Food requirements for the body.
Tuesday	2:00— 4:00	Discussion—Food containing nitrogen. Demonstration—Protein foods: Milk, eggs, cheese.
Wednesday	2:00— 4:00	Discussion—Protein and fat in the diet. Demonstration—Meats: Fats.
Thursday	2:00— 4:00	Discussion—Carbohydrates in the diet. Demonstration—Starchy vegetables; bread.
Friday	2:00— 4:00	Discussion—Fruits and green vegetables.

Program for Movable School with Two Instructors

Monday	2:00— 3:00	Meaning of household science to the housekeeper (shelter, clothing, food).
	3:00— 4:00	Food problems (introduction),
	4:00— 4:30	Organization of girls' class.
Tuesday	9:00—10:30	Girls' class—Protein foods: Milk, eggs, custard, junket, creamed eggs.
	10:30—11:30	General class—Better living conditions; household sanitation.
	2:00— 2:30	Discussion—Foods containing nitrogen.
	2:30— 4:00	Demonstration—Eggs, cheese.
Wednesday	9:00—10:30	Girls' class—Uses of tough and tender meat.
	10:30—11:30	The bedrooms and living rooms.
	2:00— 2:30	Protein and fat in the diet.
	2:30— 4:00	Demonstration—Meats; frying.
Thursday	9:00—10:30	Girls' class—Starchy vegetables; breads.
	10:30—11:30	The kitchen; household conveniences.
	2:00— 2:30	Carbohydrates in the diet.
	2:30— 4:00	Demonstration—Sugar and starches; bread.
Friday	9:00—10:30	Girls' class—Preparation of fruits.
	10:30—11:30	Selection and care of clothing.
	2:00— 2:30	Water and mineral matter; combinations.
	2:30— 4:00	Demonstration—Fruits and green vegetables; salads.

COMMUNITY ADVISER

The University is endeavoring to connect its activities with the people of the State as represented in their business and neighborhood organizations. It recognizes that the community is the real center of progress and assumes that all substantial advance will be the direct result of the initiative and activity of the people themselves who constitute the personnel of this social unit, that contributions from the University will be mainly in the form of suggestion, stimulus, and information, and that some organic connection between the two is desirable.

This connection is attempted through an officer known as the Community Adviser, who meets with chambers of commerce, neighborhood associations, and other community organizations, advising with them as to the best means of utilizing whatever interests and impulses may be available at the time for furthering the general welfare.

In this way the University seeks to assist in the development of a community consciousness and the building up of a community spirit that is willing to assume the obligations and the labor necessary to the advancement of society as a whole as distinguished from the advancement of the individuals who compose it.

PART V
AUXILIARY SCIENTIFIC BUREAUS

THE AGRICULTURAL EXPERIMENT STATION

EDMUND JANES JAMES, Ph.D., LL.D., PRESIDENT

STAFF

EUGENE DAVENPORT, M.Agr., LL.D., *Director*
CYRIL GEORGE HOPKINS, Ph.D., *Vice-Director*
STEPHEN ALFRED FORBES, Ph.D., *Consulting Entomologist*
DONALD MCINTOSH, V.S., *Consulting Veterinarian*
HENRY LEWIS RIETZ, Ph.D., *Statistician*
BURT EARDLEY POWELL, Ph.D., *Editor, Agricultural Press Bulletins*
ANNA CUSHMAN GLOVER, *Assistant Secretary*

In Agronomy

CYRIL GEORGE HOPKINS, Ph.D., *Chief, Agronomy and Chemistry*
JEREMIAH GEORGE MOSIER, B.S., *Chief, Soil Physics*
LOUIE HENRIE SMITH, Ph.D., *Chief, Plant Breeding*
*JAMES HARVEY PETTIT, Ph.D., *Chief, Soil Fertility*
ORA STANLEY FISHER, B.S., *Assistant Chief, Soil Fertility*
†WILLIAM GEORGE ECKHARDT, B.S., *Associate, Soil Fertility*
AXEL FERDINAND GUSTAFSON, M.S., *Associate, Soil Physics*
ERNEST VAN ALSTINE, B.S., *Associate, Chemistry*
JOSEPH PAUL AUMER, B.S., *Associate, Chemistry*
CLARENCE CHESTER LOGAN, B.S., *Associate, Soils Extension*
SIDNEY VIEL HOLT, B.S., *Associate, Soil Physics*
HAROLD WILSON STEWART, B.S., *Associate, Soil Physics*
HENRY CLYDE WHEELER, B.S., *Associate, Soil Physics*
JOHN EZRA WHITCHURCH, B.S., *Associate, Soil Fertility*
EZEKIEL EDWARD HOSKINS, B.S., *Associate, Soil Fertility*
WILLIAM LEONIDOS BURLISON, M.S., *Associate, Crop Production*
WARD HANSON SACHS, B.S., *Associate, Chemistry*
WALTER BYRON GERNERT, Ph.D., *Associate, Plant Breeding*
ALBERT LEMUEL WHITING, Ph.D., *Associate, Soil Biology*
FREDERICK CHARLES BAUER, B.S., *Associate, Soil Fertility*
FREDERICK MARTIN WILLIAM WASCHER, B.S., *First Assistant, Soil Physics*
FOREST ADDISON FISHER, B.S., *First Assistant, Soil Physics*
FRANK WILLIAM GARRETT, B.S., *First Assistant, Soil Fertility*
WILBUR ROY LEIGHTY, B.S., *First Assistant, Chemistry*
GERTRUDE NEIDERMAN, M.S., *Assistant, Chemistry*
ORR MILTON ALLYN, B.S., *Assistant, Crop Production*
ROBERT WILLIAM DICKENSON, B.S., *Assistant, Soil Physics*
LEO ROSS BINDING, B.S., *Assistant, Chemistry*
HARRISON FRED THEODORE FAHRNKOPF, B.S., *Assistant, Soil Fertility*
GEORGE EDWARD GENTLE, B.S., *Assistant, Soil Physics*

*Deceased, December 30, 1914.
†On leave.

Harry Charles Gilkerson, B.S., *Assistant, Soil Fertility*
Edward Harvey Walworth, B.S., *Assistant, Crop Production*
Howard John Snider, B.S., *Assistant, Soil Fertility*
Arthur Maxwell Brunson, B.S., *Assistant, Plant Breeding*
Warren Rippey Schoonover, B.S., *Assistant, Soil Biology*
Clinton B Clevenger, M.S., *Assistant, Chemistry*
Orland I Ellis, B.S., *Assistant, Soil Physics*
Henry August deWerff, B.S., *Assistant, Soil Physics*
Edward Fritchoff Torgerson, B.S., *Assistant, Soil Physics*

In Animal Husbandry

Herbert Windsor Mumford, B.S., *Chief*
Harry Sands Grindley, D.Sc., *Chief, Animal Nutrition*
Walter Castella Coffey, M.S., *Chief, Sheep Husbandry*
John A Detlefsen, D.Sc., *Assistant Chief, Genetics*
Henry Perly Rusk, M.S.A., *Assistant Chief, Beef Cattle*
James Lloyd Edmonds, B.S., *Assistant Chief, Horse Husbandry*
*Arthur Donaldson Emmett, A.M., *Assistant Chief, Animal Nutrition*
Walter Frederick Handschin, B.S., *Associate, Animal Husbandry*
Walter Edward Joseph, Ph.D., *Associate, Animal Husbandry*
Sleeter Bull, M.S., *Associate, Animal Nutrition*
Harold Hanson Mitchell, B.S., *Associate, Chemistry*
William Herschel Smith, M.S., *First Assistant, Animal Husbandry*
Wilbur Jerome Carmichael, B.S., *First Assistant, Animal Husbandry*
James Burton Andrews, B.S., *First Assistant, Animal Husbandry*
Elmer Roberts, B.S., *First Assistant, Genetics*
John Jonathan Yoke, B.S., *Assistant, Animal Husbandry*
Charles Ivan Newlin, M.S., *Assistant, Animal Husbandry*
Mary Helen Keith, B.S., *Assistant, Animal Nutrition*
Claude Harper, B.S., *Assistant, Animal Husbandry*
James Wilbur Whisenand, B.S., *Assistant, Animal Husbandry*
†Anton Prasil, B.S., *Assistant, Animal Chemistry*

In Dairy Husbandry

Harry Alexis Harding, Ph.D., *Chief*
Wilbur John Fraser, M.S., *Chief, Dairy Farming*
Nelson William Hepburn, M.S., *Assistant Chief, Dairy Manufactures*
Martin John Prucha, Ph.D., *Assistant Chief, Dairy Bacteriology*
Royden Earl Brand, M.S., *Associate, Dairy Husbandry*
Harry Montgomery Weeter, *Assistant, Dairy Husbandry*
Jesse Melangthon Barnhart, M.S., *First Assistant, Chemistry*
LeRoy Lang, M.S., *Associate, Dairy Manufactures*
William Truman Crandall, M.S., *Associate, Milk Production*
Ray Stillman Hulce, M.S., *First Assistant, Milk Production*
Oliver Arnold Keller, B.S., *Assistant, Dairy Manufactures*
Harrison August Ruehe, B.S., *First Assistant, Dairy Manufactures*
Frank Ashmore Pearson, B.S.A., *Assistant, Dairy Husbandry*
William Wodin Yapp, M.S., *Assistant, Dairy Husbandry*
William Barbour Nevens, B.S., *Assistant, Dairy Husbandry*
Frank Turner, B.S., *Assistant, Dairy Husbandry*

*On leave.
†Resigned, November 21, 1914.

In Horticulture

JOSEPH CULLEN BLAIR, M.S.A., *Chief*
CHARLES SPENCER CRANDALL, M.S., *Chief, Plant Breeding*
JOHN WILLIAM LLOYD, M.S.A., *Chief, Olericulture*
HERMAN BERNARD DORNER, M.S., *Assistant Chief, Floriculture*
BETHEL STEWART PICKETT, M.S., *Assistant Chief, Pomology*
OSCAR S WATKINS, B.S., *Associate, Horticultural Chemistry*
WARREN ALBERT RUTH, A.M., *Associate, Horticultural Chemistry*
ERNEST WINFIELD BAILEY, M.S., *Associate, Plant Breeding*
CHARLES ELMER DURST, M.S., *Associate, Olericulture*
SIMEON JAMES BOLE, A.M., *Associate, Pomology*
JOHN JOSEPH GARDNER, M.S., *Associate, Pomology*
IRA DENT ALLISON, B.S., *Associate, Horticulture*
THOMAS BREGGER, B.S., *First Assistant, Plant Breeding*
ALFRED JOSEPH GUNDERSON, B.S., *First Assistant, Pomology*
FRED WEAVER MUNCIE, M.S., *First Assistant, Floricultural Chemistry*
GEORGE LEO PELTIER, A.M., *Assistant, Floricultural Pathology*
CHARLES CHRISTIAN REES, A.B., *Assistant, Pathology*
JAMES HUTCHINSON, *Assistant, Floriculture*
AUGUST GEORGE HECHT, B.S., *Assistant, Floriculture*
DUANE TAYLOR ENGLIS, M.A., *Assistant, Floricultural Chemistry*
LEE ELLIS MILES, B.A., *Assistant, Floriculture*
JULIA ALBERTA HARPER, A.B., *Editorial Assistant*

By an act approved March 2, 1887, the national government appropriated $15,000 per annum to each state for the purpose of establishing and maintaining, in connection with the colleges founded upon the congressional act of 1862, agricultural experiment stations, "to aid in acquiring and diffusing among the people of the United States useful and practical information on subjects connected with agriculture, and to promote scientific investigation and experiment respecting the principles and applications of agricultural science." Under this provision the *Agricultural Experiment Station for Illinois* was founded in 1888 and placed under the direction of the Trustees of the University; a part of the University farm, with buildings, was assigned for its use.

The federal grant has since been increased to $30,000 per year. This is supplemented by state appropriations which make an aggregate fund of nearly a quarter of a million dollars devoted wholly to research in agriculture.

Investigations are conducted in the growing and marketing of orchard fruits, the methods of production of meats and of dairy goods, the principles of animal breeding and of nutrition, and the improvement and the economic production of crops. All the principal types of soil of the State are being studied in the laboratory under glass and in the field. A soil survey is in progress which when finished will map and describe the soil of every farm of the State down to an area of ten acres. Between forty and fifty fields and orchards are operated in various portions of the State for the study of local problems, and assistants are constantly on the road for the conduct of experiments or to give instruction to producer or consumer. The results of investigation are published in bulletins, which are issued in editions of 40,000 and distributed free of charge.

Much of this work is of interest to students, especially of graduate grade, and it is freely available for this purpose, so far as is consistent with the interests of the Station.

THE ENGINEERING EXPERIMENT STATION

EDMUND JANES JAMES, Ph.D., LL.D., PRESIDENT

STAFF

*WILLIAM FREEMAN MYRICK GOSS, M.S., D.Eng., *Director*
CHARLES RUSS RICHARDS, M.E., M.M.E., *Acting Director*
THE HEADS OF THE DEPARTMENTS OF THE COLLEGE OF ENGINEERING

Special Investigators

HERBERT FISHER MOORE, M.M.E., *Professor of Engineering Materials in the Department of Theoretical and Applied Mechanics*
DAVID FORD MCFARLAND, A.M., M.S., Ph.D., *Assistant Professor in the Department of Chemistry*
WILLIS APPLEFORD SLATER, M.S., C.E., *First Assistant in the Department of Theoretical and Applied Mechanics*
ROBERT BROWDER KELLER, B.S., *First Assistant in the Department of Railway Engineering*
TRYGVE D YENSEN, M.S., E.E., *First Assistant in the Department of Electrical Engineering*
ALONZO PLUMSTED KRATZ, M.S., *First Assistant in the Department of Mechanical Engineering*
HARRISON FREDERICK GONNERMAN, M.S., *First Assistant in the Department of Theoretical and Applied Mechanics*
HAROLD HOUGHTON DUNN, M.S., *Assistant in the Department of Railway Engineering*
LEROY ALONZO WILSON, M.M.E., *Assistant in the Department of Mechanical Engineering*

Research Fellows

JEFFERSON HALL BELT, B.S., *Electrical Engineering*
JULIAN MONTGOMERY, C.E., *Theoretical and Applied Mechanics*
MERLE LOUIS NEBEL, B.S., *Mining Engineering*
ROBERT BEDFORD POGUE, B.M.E., *Railway Engineering*
JASPER OWEN DRAFFIN, B.S., *Theoretical and Applied Mechanics*
WALTER ARTHUR GATWARD, B.S., *Electrical Engineering*
THOMAS ERNEST LAYNG, M.A., *Chemistry*
LESTER CLYDE LICHTY, B.Sc., *Mechanical Engineering*
WILLIAM PENN LUKENS, A.B., *Mechanical Engineering*
EVERETT GILLHAM YOUNG, B.S., *Railway Engineering*

THOMAS WILBUR DIECKMANN, *Half-time Student Assistant in Office of Director*

*On leave.

The Engineering Experiment Station was established by action of the Board of Trustees, December 8, 1903. Its purposes are the stimulation and elevation of engineering education, and the study of problems of special importance to professional engineers and to the manufacturing, railway, mining, and industrial interests of the State and the country. The practical nature of the investigations and their adaptation to present-day needs are assured by means of conferences with committees of the leaders of the State's industrial activities.

The control of the Station is vested in the heads of the several departments of the College of Engineering. These constitute the Station Staff, and, with the Director, determine the character and extent of the investigations to be undertaken.

Up to the present time seventy-six bulletins of value to engineering science have been published. The experiments have related chiefly to tests of high-speed tool steels; the resistance of tubes to collapse; the holding power of railroad spikes; the effect of scale on heat transmission; roof trusses; base and bearing plates in columns and beams; stresses in chain links; extensions of the Dewey decimal system of classification; tests of electric lamps; lighting country homes by private electric plants; street lighting; high steam pressures in locomotive service; rate of formation of carbon monoxide in gas producers; fuel tests; the weathering of coal and the spontaneous combustion of coal; thermal conductivity of fireclay; heat transmissions; freight train resistance; tests of a suction gas producer; tests of concrete; reinforced concrete beams and columns; tests of cast-iron and reinforced concrete culvert pipe; tests of brick columns and terra cotta block columns; tests of timber beams; tests of built-up columns under load; tests to determine the resistance to flow through locomotive water columns; tests of nickel-steel riveted joints; strength of rolled zinc; inductance of coils; mechanical stresses in transmission lines; starting currents of transformers; superheated steam in locomotive service; a new analysis of the cylinder performance of reciprocating engines; effects of cold weather upon train resistance and tonnage rating; coking of coal at low temperatures; characteristics and limitations of the series transformer; electron theory of magnetism; entropy-temperature and transmission diagrams for air; tests of reinforced concrete buildings under load; the steam consumption of locomotive engines from indicator diagrams; properties of saturated and superheated ammonia vapor; reinforced concrete wall footings and column footings; strength of I-beams in flexure; coal washing in Illinois; mortar-making qualities of Illinois sands; bond between concrete and steel; magnetic and other properties of electrolytic iron melted in vacuo; acoustics of auditoriums; tractive resistance of a 28-ton electric car; thermal properties of steam; and analysis of coal with phenol as solvent.

THE STATE LABORATORY OF NATURAL HISTORY

EDMUND JANES JAMES, Ph.D., LL.D., PRESIDENT

STAFF

STEPHEN ALFRED FORBES, Ph.D., LL.D., *Director*
CHARLES ARTHUR HART, *Systematic Entomologist*
ROBERT EARL RICHARDSON, A.M., *Biologist, in charge of Biological Station*
VICTOR ERNEST SHELFORD, Ph.D., *Biologist, in charge of Research Laboratories*
MARY JANE SNYDER, *Secretary*
CHARLES EDWIN JANVRIN, Ph.B., B.L.S., *Librarian*

In 1885 the General Assembly passed an act transferring the *State Laboratory of Natural History* from the Illinois State Normal University to the University of Illinois. This laboratory was created for the purpose of making a natural history survey of the State, the results of which should be published in a series of bulletins and reports; and for the allied purpose of furnishing specimens illustrative of the flora and fauna of the State to the public schools and to the State museum. For these purposes direct appropriations are made by the legislature from session to session. Material of all classes has been collected in all parts of the State, field observations and experiments have been conducted, extending over many years, and twelve volumes have been published in the form of bulletins and final reports.

The most important problem upon which the work of the survey is at present concentrated is the effect of drainage operations, sewage contaminations, and other results of industrial occupancy upon the general system of life in our principal rivers.

THE STATE ENTOMOLOGIST'S OFFICE

STAFF

Stephen Alfred Forbes, Ph.D., LL.D., *State Entomologist*
Charles Arthur Hart. *Systematic Entomologist*
Wesley Pillsbury Flint, *Assistant for Central Illinois*
Lindley Malcolm Smith, B.S., *Assistant for Southern Illinois*
David Kent MacMillan, B.S., *Assistant for Northern Illinois*
Pressley Adams Glenn, A.M., *Chief Horticultural Inspector*
John Russell Malloch, *Illustrator and Custodian*

The work of the *State Entomologist's Office* has been done at the University of Illinois since January, 1885; by legislative enactment in 1899 it was permanently established at the University, the Trustees of which are required by that act to provide for the Entomologist and his assistants such office and laboratory rooms as may be necessary to the performance of their duties.

It is the duty of this officer to investigate all insects dangerous to any valuable property or dangerous to the public health, and to conduct experiments for the control of injuries to persons or property by insects, publishing the results of his researches biennially in his official report. He is required also to inspect and certify annually all Illinois nurseries and all importations of nursery stock, and to maintain a general supervision of the horticultural property of the State with respect to its infestation by dangerous insects and its infection with contagious plant disease.

Twenty-seven reports have now been published by the Entomologist, fourteen of them since the transfer of his office to the University.

THE STATE WATER SURVEY

EDMUND JANES JAMES, Ph.D., LL.D., PRESIDENT

STAFF

EDWARD BARTOW, Ph.D., *Director*
SAMUEL WILSON PARR, M.S., *Consulting Chemist*
ARTHUR NEWELL TALBOT, C.E., *Consulting Engineer*
*OTTO RAHN, Ph.D., *Consulting Bacteriologist*
PAUL HANSEN, B.S., *Engineer*
WILFRED FRANCIS LANGELIER, M.S., *Inspector*
HARRY PEACH CORSON, M.S., *Chemist and Bacteriologist*
RALPH HILSCHER, B.S., *Assistant Engineer*
MILFORD EVERETT HINDS, M.S., *Assistant Chemist*
FRED WILBUR TANNER, M.S., *Assistant Bacteriologist*
FLOYD WILLIAM MOHLMAN, M.S., *Assistant Chemist*
HARRY FOSTER FERGUSON, B.S., *Assistant Engineer*
HENRY LAWRENCE HUENINK, M.S., *Assistant Chemist*
WESLEY WALLACE HANFORD, B.S., *Assistant Chemist*
MAURICE CHARLES SJOBLOM, B.S., *Engineering Assistant*
JOHN FRANCIS SCHNELLBACH, B.S., *Engineering Assistant*
ARTHUR NORTON BENNETT, B.S., *Assistant Chemist*

A chemical survey of the waters of the State was begun in the latter part of September, 1895. In 1897 the legislature authorized the continuance of the work and directed the Trustees of the University to establish a chemical and biological survey of the waters of the State. In 1911 the legislature imposed additional duties on the State Water Survey, authorizing the Water Survey to employ field men to inspect water supplies, water-sheds, etc., and to make, free of charge, sanitary examinations of water for citizens of Illinois, and made increased appropriations. The Survey is collecting data concerning the water supplies, sewerage systems, and water-sheds, making chemical and bacteriological examinations to demonstrate the sanitary condition of water supplies and streams, and determining standards of purity for drinking waters. The Survey advises municipal authorities how best to obtain and conserve an adequate supply of pure water for domestic and manufacturing purposes.

The Survey is a division of the department of chemistry of the University of Illinois, and special laboratories are equipped in the Chemistry Building for conducting the work. The engineering division is located in Engineering Hall.

*Absent, 1914-15.

THE STATE GEOLOGICAL SURVEY

COMMISSION

GOVERNOR EDWARD F DUNNE, *Chairman*

PROFESSOR T. C. CHAMBERLIN, Ph.D., D.Sc., LL.D., *Vice-Chairman*

PRESIDENT EDMUND JANES JAMES, Ph.D., LL.D., *Secretary*

STAFF

FRANK WALBRIDGE DEWOLF, B.S., *Director,* Urbana

EDWARD BARTOW, Ph.D., *Consulting Chemist in Water Analysis,* University of Illinois, Urbana

ULYSSES SHERMAN GRANT, Ph.D., *Consulting Geologist in Lead and Zinc Studies,* Northwestern University, Evanston

SAMUEL WILSON PARR, M.S., *Consulting Chemist in Coal Investigations,* University of Illinois, Urbana

CHARLES WESLEY ROLFE, M.S., *Consulting Geologist in Clay Investigations,* University of Illinois, Urbana

ALBERT VICTOR BLEININGER, B.S., *Consulting Ceramist,* U. S. Bureau of Standards, Pittsburgh, Pa.

ROLLIN D SALISBURY, A.M., LL.D., *Consulting Geologist in Preparation of Educational Series,* University of Chicago, Chicago

FRED HALL KAY, B.S., *Assistant State Geologist,* Urbana

THOMAS EDMUND SAVAGE, Ph.D., *Geologist,* University of Illinois, Urbana

STUART WELLER, Ph.D., *Geologist,* University of Chicago, Chicago

GILBERT H CADY, A.M., *Assistant Geologist,* Urbana

E WESLEY SHAW, B.S., *Assistant Geologist in Co-operative Surveys,* Urbana, Ill., and Washington, D. C.

WALLACE LEE, *Assistant Geologist in Co-operative Surveys,* Urbana, Ill., and Washington, D. C.

JUSTA M LINDGREN, A.M., *Chemist,* Urbana

WILLIAM HENRY HERRON, B.S., *Geographer in charge of Topographical Surveys,* Urbana, Ill., and Washington, D. C.

The Forty-fourth General Assembly passed an act, in force July 1, 1905, providing for the establishment at the University of Illinois of the *State Geological Survey.* The Survey is under the control of a Commission, of which the President of the University is an *ex officio* member.

The purpose of the Survey is primarily the study and exploration of the mineral resources of Illinois. Field parties are organized for the investigation of oil, clay, coal, stone, artesian water, cement materials, and road materials, and for general scientific investigations. The Survey is charged also with the duty of making a complete topographical and geological survey of the State. The topographical surveys are now being carried on in co-operation with the United States Geological Survey. These will lead to the publication of a series of bulletins and maps, eventually covering the entire State.

The Forty-fifth General Assembly further charged the Commission with the duty of making surveys and studies of lands subject to overflow, with a view to their reclamation. Work has been carried on in co-operation with the Rivers and Lakes Commission, the United States Geological Survey, and the United States Department of Agriculture, along the Sangamon, Kaskaskia, Big Muddy, Little Wabash, Embarrass, Spoon, and Saline rivers. Reports have been issued on the Little Wabash, Kaskaskia, and Embarrass.

The laboratory work is done in connection with various department laboratories of the University. The equipment includes a working library, maps, and a growing collection, illustrating the geological and the economical resources of the State. Twenty-six bulletins and a large number of maps have been published. Many temporary assistants besides the regular corps are employed each summer.

Under an agreement between the State Geological Survey and the College of Engineering on the one hand, and the United States Bureau of Mines on the other, a branch station has been located at Urbana for the demonstration of modern methods in mine-rescue work, and for the study of mining methods and mine wastes in Illinois.

A similar agreement by the above-named parties provides for a co-operative investigation of the Illinois coal mining industry. The Forty-seventh General Assembly made appropriations to carry on the work for two years, and the Forty-eighth General Assembly repeated the appropriations for an equal period. See page 48.

THE BOARD OF EXAMINERS IN ACCOUNTANCY

EDMUND JANES JAMES, Ph.D., LL.D., PRESIDENT

BOARD OF EXAMINERS

MARQUIS EATON, *Chicago*
*PETER WHITE, C.P.A., *Chicago*

UNIVERSITY COMMITTEE

DAVID KINLEY, Ph.D., LL.D., *Chairman*
CHARLES MAXWELL MCCONN, A.M., *Secretary*
EDWARD HARRIS DECKER, A.B., LL.B.

By a law passed in 1903 the State University is made an examining board of applicants for certificates as certified public accountants. To carry out the provisions of the law the Board of Trustees have appointed a board of three examiners to prepare, conduct, and grade examinations, and a University committee to conduct the routine work. Under the law one examination must be held each year in May, but examinations have been held also in November or December of each year in which there were a sufficient number of applicants. All the examinations thus far given have been held in the city of Chicago.

Applicants for the certificate of Certified Public Accountant are required to pass examinations in the theory of accounts, commercial law, auditing, and practical accounting.

The Illinois Society of Certified Public Accountants offers annually a gold medal and a silver medal to be awarded to the persons passing the C. P. A. examination with the highest total marking in all subjects and with the second highest total marking in all subjects respectively.

*Deceased, December 17, 1914.

CO-OPERATIVE INVESTIGATION OF ILLINOIS COAL PROBLEMS AND MINE RESCUE STATION

EDMUND JANES JAMES, Ph.D., LL.D., PRESIDENT

STAFF

College of Engineering

*WILLIAM FREEMAN MYRICK GOSS, M.S., D.Eng., *Dean*
CHARLES RUSS RICHARDS, M.M.E., *Acting Dean*
HARRY HARKNESS STOEK, B.S., E.M., *Professor of Mining Engineering*
STEPHEN OSGOOD ANDROS, A.B., B.S., E.M., *Associate in Mining Engineering*
SPECIAL MINING ENGINEERS AND FIELD SAMPLERS

State Geological Survey

FRANK WALBRIDGE DEWOLF, B.S., *Director, State Geological Survey*
SAMUEL W PARR, M.S., *Consulting Chemist*
FRED HALL KAY, B.S., *Assistant State Geologist*
GILBERT HAVEN CADY, A.B., M.S., *Geologist*
SPECIAL GEOLOGISTS AND FIELD SAMPLERS

United States Bureau of Mines

JOSEPH AUSTIN HOLMES, B.S., D.Sc., LL.D., *Director, United States Bureau of Mines*
GEORGE S RICE, E.M., *Chief Mining Engineer,* Pittsburgh, Pa.
HOWARD I SMITH, B.S. (Min.), *Assistant Mining Engineer*
JOHN W KOSTER, E.M., *Assistant Mining Engineer, studying the use of explosives*
†LOUIS A SCHOLL, B.S., *Chemist, studying the explosibility of coal dust*
JAMES R. FLEMING, *Instructor in Mine Safety*

The department of Mining Engineering of the University of Illinois, the State Geological Survey, and the United States Bureau of Mines are co-operating in the investigation of some of the problems connected with the mining of coal in the State of Illinois, under authority granted by the Forty-seventh General Assembly.

This co-operative work is constructive as well as statistical, based upon accurate data and taking account of all existing conditions, to enable the operators and miners of the State to produce coal more safely, more cheaply, and with less waste.

A force of trained mining engineers, geologists, and chemists has been placed at the disposal of the coal industry of Illinois.

*On leave.
†Resigned, September 22, 1914.

A Mine Explosion and Mine Rescue Station is maintained in Urbana by the United States, in co-operation with the State Geological Survey and the Department of Mining Engineering of the University of Illinois.

The purpose of this station is to interest all connected with the mining industry in the use of breathing resuscitation apparatus in connection with rescue work in mines, as an aid in fighting mine fires, and in the opening of mines which have been sealed on account of fires. The station not only gives demonstrations, but undertakes to train men in the use of such apparatus, the service being rendered gratuitously, and, as far as possible, to all interested in the subject.

ILLINOIS MINERS' AND MECHANICS' INSTITUTES

EDMUND JANES JAMES, Ph.D., LL.D., PRESIDENT

Advisory Committee

CHARLES RUSS RICHARDS, M.E., M.M.E., *Professor of Mechanical Engineering, Head of the Department of Mechanical Engineering, and Acting Dean of the College of Engineering*

HARRY HARKNESS STOEK, B.S., E.M., *Professor of Mining Engineering*

STAFF

ROBERT YOUNG WILLIAMS, A.B., E.M., *Director*
HARRY DRAPER EASTON, B.S., E.M., *Instructor*
EDWARD CLARENCE LEE, B.S., E.M., *Instructor*
WILLIAM LLEWELYN MORGAN, *Instructor*
HARVEY EDSON SMITH, B.S., E.M., *Instructor*

The Illinois Miners' and Mechanics' Institutes were established by Act of the State Legislature, Senate Bill No. 259, approved May 25, 1911. An appropriation of $15,000 per annum to carry out this authorization was included in House Bill No. 895, approved June 30, 1913.

The purpose of the Institutes, as stated in the Act, is "to prevent accidents in mines and other industrial plants and to conserve the resources of the state."

In the development of this purpose, any and all means may be employed which promise "to promote the technical efficiency of all persons working in and about the mines and other industrial plants and to assist them to better overcome the increasing difficulties of mining and other industrial employments."

The administration of the Institutes is vested in the Trustees of the University. The Trustees have appointed a Director and have placed the Institutes under the general supervision of the department of mining engineering of the University of Illinois.

PART VI
LIST OF STUDENTS, ETC.
(1914-1915)

LIST OF STUDENTS

THE GRADUATE SCHOOL

Albrecht, William Albert—Scholar in Agronomy		
*A.B., B.S., 1911, 1914		*Champaign*
Alden, Earle Stanley—English		
A.B. *(Colorado Coll.)* 1909		
A.M. *(Harvard Univ.)* 1913		*Los Angeles, California*
Allen, Louis—French		
A.B., 1913		*Clinton*
Allen, Paul William—Dairy Bacteriology		
B.S. *(St. Lawrence Univ.)* 1910		
M.S. *(Cornell Univ.)* 1914		*Urbana*
Allen, Reuben Winfield—Chemistry		
A.B., M.S. *(Univ. of Georgia)* 1911, 1913		*Thomaston, Georgia*
Alvord, Idress Head—History		
(Howard-Payne Coll.)		*Urbana*
Anderson, Andrew John Albert—Civil Engineering		
B.S.M.E. *(Lewis Institute)* 1913		*Chicago*
Andrews, James Burton—Animal Husbandry		
B.S., 1913		*Urbana*
Andros, Stephen Osgood—Mining Engineering		
A.B. *(Bowdoin Coll.)* 1897		
B.S., E.M. *(Michigan Coll. of Mines)* 1902, 1903		*Champaign*
Babbitt, Albert—Scholar in Mathematics		
A.B. *(Pennsylvania State Coll.)* 1914		*Philadelphia, Pennsylvania*
Babbitt, Harold Eaton—Municipal and Sanitary Engineering		
S.B. *(Massachusetts Inst. of Tech.)* 1911		*Urbana*
Bacon, Gertrude Auld—Scholar in Entomology		
A.B., M.A. *(Pomona Coll.)* 1913, 1914		*Claremont, California*
Bade, Courtland Walter—Electrical Engineering		
E.E. Diploma *(Technicum Mittuuda, Saxony, Germany)* 1914		*Hanover, Germany*
Bair, William Harry—Physics		
B.S. *(Ohio Northern Univ.)* 1908		
M.S. 1914	SS†	*Manhatten, Kansas*
Baker, James Chamberlain—Philosophy		
A.B. *(Illinois Wesleyan Univ.)* 1898		
S.T.B. *(Boston Univ.)* 1905		*Urbana*
‡Ball, John Dudley—Electrical Engineering		
B.S. 1907		*Pontiac*
Ball, Theodore Rolly—Chemistry		
B.S. *(Drake Univ.)* 1908	(SS)	*Des Moines, Iowa*
Barber, Julia Minetta—Scholar in English		
A.B., 1913		*La Fox*
Barbre, Clarence—Organic Analysis (Quantitative)		
A.B. *(Eureka Coll.)* 1913		
B.S., 1914	(SS)	*Taylorville*
Barnhart, Jesse Melangthon—Animal Chemistry		
B.S., 1906		*Urbana*
Bauer, Frederick Charles—Soil Fertility		
B.S., 1909	(SS)	*Champaign*
Baumgardner, Henry Clay—Animal Husbandry		
B.Sc. *(Ohio State Univ.)* 1914		*Sugar Grove, Ohio*
Baumgartner, Rachel Ann—Zoology		
A.B. *(Kansas Univ.)* 1912		*Halstead, Kansas*
Bayley, Paul Levern—Physics		
A.B. *(Univ. of Arkansas)* 1913		
M.S., 1914		*Ft. Smith, Arkansas*
Beattie, George Wilson—Education		
A.B. *(Ripon Coll.)* 1901	SS	*So. Hartford, New York*
Beatty, Albert James—Education		
A.B. *(Knox Coll.)* 1900		*Urbana*
Beck, Clyde Byron—English		
A.B. *(Earlham Coll.)* 1906		*Richmond, Indiana*

*Degrees were conferred by the University of Illinois unless otherwise specified. Two degrees from the same institution are indicated thus: A.B., A.M., 1909, 1911.

†Attendance during both the Summer Session of 1914 and the regular session of 1914-15 is indicated by SS in parenthesis; during the Summer Session only, by SS.

‡Candidate for professional degree in engineering.

Beck, Mary Lavenia—Scholar in English
B.S. *(Coe Coll.)* 1908 (SS) *Morning Sun, Iowa*
Becker, Albert John—Theoretical and Applied Mechanics
B.S., M.E. *(Univ. of Michigan)* 1903, 1907 (SS) *Grand Forks, North Dakota*
*Bell, Rodney Linton—Civil Engineering
B.S., 1909 *West York*
Belt, Jefferson Hall—Fellow in Electrical Engineering
B.S., 1912 *Saybrook*
Bennett, Arthur Norton—Chemistry
B.S.,1907 (SS) *Champaign*
Berkema, Ira John—English
A.B., 1910 *Onarga*
Berninger, Harriett Josephine—Latin
A.B. *(Indiana State Normal)* *Lancaster, Indiana*
Biegler, Philip Sheridan—Electrical Engineering
B.S. *(Univ. of Wisconsin)* 1905 *Champaign*
Bishop, Mildred Catherine—History
A.B. *(Brown Univ.)* 1912 *No. Attleboro, Massachusetts*
Bissell, Don Warren—Organic Chemistry
B.S. *(New Hampshire Coll.)* 1914 *Keene, New Hampshire*
Bogart, Stella Marshall—Italian
A.B. *(Oberlin Coll.)* 1901 *Urbana*
Bole, Simeon James—Education
A.B. *(Univ. of Michigan)* 1906 *Champaign*
Bond, John David—Mathematics
A.B. *(Univ. of Tennessee)* 1909
(Work for A. M. completed) SS *Gallatin, Tennessee*
Bowden, Robert Douglas—Political Science
A.B. *(State Coll. of Oklahoma)* 1913 SS *Sedalia, Kentucky*
Brady, St. Elmo—Fellow in Organic Chemistry
A.B. *(Fisk University)* 1908 *Louisville, Kentucky*
Braham, Joseph Marvin—Physical Chemistry
B.S. *(Univ. of Idaho)* 1914 *Spokane, Washington*
Braley, Silas Alonzo—Industrial Chemistry
A.B. *(Morningside College)* 1913 *Cherokee, Iowa*
Bregger, Thomas—Genetics (Plant Breeding)
B.S., 1910 *Champaign*
Brown, Howard Dexter—Horticulture
B.S., 1914 *Tiffin, Ohio*
Brown, Hugh Alexander—Electrical Engineering
B.S., 1911 *Urbana*
Bruner, Mary Viola—Latin
A.B., 1913 (SS) *Mattoon*
Brunson, Arthur Maxwell—Agronomy
B.S., 1913 *Urbana*
Brush, Elizabeth Parnham—History (European)
A.B. *(Smith College)* 1909 *Boulder, Colorado*
Buchen, Walther Albert—English
B.A. *(Univ. of Wisconsin)* 1911
A.M., 1913 *Urbana*
Bull, Sleeter—Animal Husbandry
B.S. *(Ohio State Univ.)* 1910
M.S. *(Pennsylvania State Coll.)* 1911 *Urbana*
Burd, Henry Alfred—Fellow in English
B.S. *(Illinois Wesleyan Univ.)* 1910
A.M., 1911 (SS) *Armstrong*
Burkhardt, Clarence Ware—Industrial Chemistry
A.B. *(Butler Coll.)* 1914 *Elwood, Indiana*
Burlison, William Leonidas—Agronomy
B.S. *(Okla. A. & M. Coll.)* 1905
M.S., 1908 (SS) *Champaign*
Burton, Laurence Vreeland—Bacteriology
B.S., M.S., 1911, 1914 *Aurora*
Callen, Alfred Copeland—Mining Engineering
B.S., M.S. *(Lehigh Univ.)* 1909, 1911 *Urbana*
Carmichael, Wilbur Jerome—Animal Husbandry
B.S., 1913 (SS) *Urbana*
Carter, Herbert Melville—Industrial Chemistry
B.S. *(Tufts Coll.)* 1913 SS *Norwood, Massachusetts*
Caswell, Omar—Education
A.B. *(Indiana Univ.)* 1897
A.M., 1914 SS *Mascoutah*
Chandler, Edward Marion Augustus—Organic Chemistry
A.B. *(Howard Univ.)* 1913
A.M. *(Clark Univ.)* 1914 *Washington, D. C.*
Charlton, Ernest Edward—Industrial Chemistry
A.B. *(Grinnell Coll.)* 1913 *Cherokee, Iowa*
Chen, Ta Che—Electrical Engineering
B.S. *(Nanyang Univ.)* 1909 *Shanghai, China*
Chenoweth, Homer Eldon—Zoology
A.B., 1913 *So. Charleston, Ohio*

*Candidate for professional degree in engineering.

Clark, Helen—Fellow in Psychology
Clark, Clifton Wirt—Economic Geology
A.B., 1913 — *Pratt, Kansas*
A.B. *(Vassar Coll.)* 1913 — *Cortland, New York*
Clark, Karl Adolph—Fellow in Chemistry
A.B., A.M. *(McMaster Univ.)* 1910, 1912 — *Toronto, Canada*
Clevenger, Charles Henry—Mathematics
B.S. *(Ohio State Univ.)* 1902
M.S. *(Univ. of Chicago)* 1910 — *Urbana*
Clevenger, Clinton B.—Agronomy
B.Sc., M.S. *(Ohio State Univ.)* 1912, 1913 (SS) *Fletcher, Ohio*
*Cleveland, Mortimer Burnham—Architecture
B.S., 1908 — *Osage, Iowa*
Cobb, Margaret Vara—Education
A.B. *(Radcliffe Coll.)* 1910
A.M., 1913 — *Falls Church, Virginia*
Colby, Arthur Samuel—Pomology
B.S. *(New Hampshire Coll.)* 1911 — *Champaign*
*Collins, Ray Arthur—Civil Engineering
B.S., 1909 — *Manila, P. I.*
Colvin, Esther Margaret—Scholar in English
A.B. *(Albion Coll.)* 1914 — *Albion, Michigan*
Conel, Jesse LeRoy—Zoology
A.B. *(Milliken Univ.)* 1912
A.M., 1913 — *Decatur*
Cooke, Delmar Gross—Scholar in English
A.B., 1912 — *Piper City*
Corson, Harry Peach—Sanitary Chemistry
B.S. *(New Hampshire Coll.)* 1910
M.S., 1912 — *Urbana*
Crane, Rufus—Botany
A.B. *(Middlebury Coll.)* 1909
B.S. *(Massachusetts Inst. of Tech.)* 1911 — *No. Hanover, Massachusetts*
Crooker, Sylvan Jay—Scholar in Physics
B.S. *(Carleton Coll.)* 1914 — *Fairmont, Minnesota*
Cruzan, Myrtle Amy—English
A.B., 1914 SS *Mattoon*
Cutler, Floy Fenton—Scholar in German
A.B. *(Hedding Coll.)* 1911 — *Abingdon*
Dalbey, Nora Elizabeth—Botany
A.B., A.M. *(Univ. of Kansas)* 1913, 1914 — *Sterling, Kansas*
Dallenbach, John Henry—Electrical Engineering
B.S., 1914 — *Champaign*
Danielson, Ralph Raymond—Ceramics
B.S., 1914 — *Chicago*
Darrah, Juanita Elizabeth—Chemistry
A.B., 1913 — *Champaign*
Davidson, Carl Nathan—Chemistry
A.B. *(Lawrence Coll.)* 1914 — *Manston, Wisconsin*
Davis, John William—Electrical Engineering
M.E. *(Cornell Univ.)* 1910 — *Petersburg, Virginia*
Davis, Mary Belle—Mathematics
A.B., 1901 — *Urbana*
Davis, Raymond Earl—Civil Engineering
B.S. *(Univ. of Maine)* 1911 (SS) *Urbana*
Davis, Robert Lesley—Botany
A.B. *(Univ. of Nebraska)* 1914 — *Lincoln, Nebraska*
Davis, Ruth Kay—Latin
A.B. *(Greenville Coll.)* 1911 — *Greenville*
Davison, Ruth Leone—Latin
A.B., 1913 SS *Marshall*
Davisson, Bert Stover—Agronomy
A.B. *(Indiana Univ.)* 1911
A.M.,1914 — *New Richmond, Indiana*
Dean, Paul Marshall—Organic Chemistry
A.B., A.M. *(Univ. of Colorado)* 1908, 1911 (SS) *Boulder, Colorado*
Debel, Niels Hinriksen—Fellow in Political Science
A.B., A.M. *(Univ. of Nebraska)* 1913, 1914 — *Blair, Nebraska*
Dickenson, Robert William—Agronomy
B.S., 1912 — *Urbana*
Dickerson, Ira Wilmer—Electrical Engineering
B.S., 1909 — *Newton*
Dixon, Raymond Ephraim—English Literature
A.B. *(Univ. of Wisconsin)* 1909 — *Dalton, Wisconsin*
(Work for A. M. completed)
*Dodd, Townsend Foster—Electrical Engineering
B.S., 1907 — *San Diego, California*
Doisy, Edward Adelbert—Fellow in Physiological Chemistry
A.B., 1914 — *Champaign*
*Dolkart, Leo—Electrical Engineering
B.S., 1903 — *Moline*

*Candidate for professional degree in engineering.

Draffin, Jasper Owen—Fellow in Theoretical and Applied Mechanics
B.S. *(Univ. of Vermont)* 1913 — *Nayon, Quebec, Canada*
Dreesen, William Henry—Economics
A.B. *(Greenville Coll.)* 1907 — *Urbana*
DuBois, Henry Mathusalem—Geology
B.S. *(Rochester Coll.)* 1908
A.B., A.M. *(Indiana Univ.)* 1913, 1914 — *Rochester, Indiana*
Dunham, William Arthur—Scholar in Political Science
A.B. *(Washington Univ.)* 1914 — *St. Louis, Missouri*
Durst, Charles Elmer—Horticulture
B.S., M.S., 1909, 1912 — *Urbana*
Ebersol, Elmer Tryon—Agronomy
A.B., 1902 (SS) *Champaign*
Edwards, Forrest Glen—Chemistry
A.B. *(Lombard Coll.)* 1907 SS *Princeville*
Ekblaw, Alma Heumann—History
A.B., 1910 — *Urbana*
Ekstein, Henry Charles—Chemistry
(Work for A. B. completed) — *Peoria*
Elliott, Erma Lytle—Scholar in Mathematics
A.B. *(Illinois Woman's College)* 1914 — *Jacksonville*
Elliott, John Asbury—Fellow in Plant Pathology
A.B. *(Fairmount Coll.)* 1913
A.M. *(Univ. of Kansas)* 1914 — *Ness City, Kansas*
Elston, Leo Weiss—Horticulture
A.B., 1913
B.S., *(Rutgers Coll.)* 1914 — *Cumberland, Maryland*
Engle, Edgar Wallace—Inorganic Chemistry
B.S. *(Drury Coll.)* 1912
M.S., 1914 — *Springfield, Missouri*
Englis, Duane Taylor—Chemistry
A.B. *(Eureka Coll.)* 1912
A.M., 1914 — *Eureka*
Ensign, Newton Edward—Theoretical and Applied Mechanics
A.B. *(McKendree Coll.)* 1905
A.B. *(Oxford Univ.)* 1908
B.S., 1911 — *Urbana*
Eppels, Conrad Joseph—French
(Royal Teachers Seminary, Germany) (SS) *Champaign*
Erdahl, Absalom C—Scandinavian Language
A.B. *(St. Olaf Coll.)* 1911
A.M., 1913 — *Frost, Minnesota*
*Erwin, John Frank—Mechanical Engineering
B.S., 1907 — *Moline*
Fager, Daniel Baldwin—Education
Graduate *(Southern Ill. State Normal)* 1883 SS *Vandalia*
Fahrnkopf, Harrison Frederick Theodore—Agronomy
B.S., 1913 — *Urbana*
Farver, Emery C.—Scholar in Mathematics
A.B. *(Otterbein Univ.)* 1914 — *North Liberty, Indiana*
Faulkner, Leslie William—Electrical Engineering
B.S., 1914 — *Champaign*
Fazel, Charles Stever—Scholar in Physics
A.B. *(Fairmount Coll.)* 1914 — *Wichita, Kansas*
Fernholz, John J.—Political Science
A.B. *(Indiana Univ.)* 1914 — *Urbana*
Fisher, Fay Lynton—Scholar in German
A.B. *(James Millikin Univ.)* 1914 — *Decatur*
Fisk, Ira William—Electrical Engineering
B.S., M.S., E.E., 1909, 1913, 1914 — *Urbana*
*Flowers, Roy Warner—Architectural Engineering
B.S., 1906 — *Gary, Indiana*
Fong, Yue Chor—Electrical Engineering
B.S. *(Nanyang Univ.)* 1912 — *Karshion, China*
Footitt, Frank—Inorganic Chemistry
A.B. *(Albion Coll.)* 1914 — *St. Johns, Michigan*
Ford, Jay Thomas—Industrial Chemistry
A.B. *(DePauw Univ.)* 1914 — *Pendleton, Indiana*
Foster, Laurence Fleming—Chemistry
A.B. *(Albion Coll.)* 1910
M.S., 1914 SS *Albion, Michigan*
Franceway, Margaret—English
A.B., 1905 SS *Granville*
Frank, Edwin Diederich August—Mechanical Engineering
B.S. *(Massachusetts Inst. of Tech.)* 1906 — *Milwaukee, Wisconsin*
Gardner, Harry—Theoretical and Applied Mechanics
B.S. *(Univ. of Wisconsin)* 1905 — *Champaign*
Garman, Philip—Fellow in Entomology
B.S. *(Kentucky State Univ.)* 1913
M.S., 1914 — *Lexington, Kentucky*

*Candidate for professional degree in engineering.

Gatward, Walter Arthur—Fellow in Electrical Engineering
B.S. *(Washington State Coll.)* 1913 — *Spokane, Washington*
Gay, Amelia Louise—English
A.B., 1912 — *Rock Port*
Gaynor, Elizabeth Prudence Webb—History
A.B. *(Univ. of Wisconsin)* 1907 (SS) *Grand Rapids, Wisconsin*
Geiling, Eugene Maximilian Karl—Agricultural Chemistry
A.B. *(Univ. of Cape of Good Hope, Africa)* 1911 — *Vryberg, South Africa*
Geldenhuys, Frans Edward—Education
A.B. *(Victoria Coll., S. Africa)* 1910
B.S. *(Cornell Univ.)* 1913 — *Johannesburg, S. Africa*
George, Enoch Franklin—Physics
A.B. *(West Virginia Univ.)* 1914 SS *Red Creek, W. Virginia*
Gerlach, Miriam—English
A.B., 1911 — *Doniphan, Missouri*
Gerry, Henry Lester—Physiological Chemistry
A.B., A.M. *(Bates Coll.)* 1909, 1912 — *Lewiston, Maine*
Gilmore, Ross Earlby—Industrial Chemistry
A.B., A.M. *(McMaster Univ., Toronto, Can.)* 1911, 1913 — *Toronto, Canada*
Godeke, Harry Frederick—Mechanical Engineering
B.S., 1905 — *Urbana*
Graham, William Morland—Sociology
A. B. *(McKendree Coll.)* — *Almyra, Kansas*
Green, Bessie Rose—Zoology
A.B., A.M., 1907, 1910 — *Ivesdale*
Greene, James Henry—Animal Husbandry
B.S., 1908 SS *Garrett, Indiana*
Griffin, Clare Elmer—Scholar in Economics
A.B. *(Albion Coll.)* 1914 — *Traverse City, Michigan*
Grimes, Nathan Cesna—Mathematics
A.B. *(Univ. of Michigan)* 1906
A.M. *(Univ. of Wisconsin)* 1909 — *Urbana*
Gross, Alfred William—Education
Ph.B. *(North-Western Coll.)* 1909 SS *Monticello*
Gratopharst, Waldo Edward—Animal Husbandry
B. S. *(Univ. of California)* 1914 — *Chicago*
*Gulley, Laurence Richard—Mechanical Engineering
B.S., 1910 — *Urbana*
Haessler, Carl Herman—Philosophy
A.B. *(Univ. of Wisconsin)* 1911
A.B. *(Oxford Univ.)* 1914 — *Milwaukee, Wisconsin*
Hake, Joseph William—Physics
B.S. *(Univ. of Missouri)* 1908
A.B., 1909
A.M. *(Northwestern Univ.)* 1913 SS *Hoylcton*
Hall-Quest, Alfred Laurence—Education
A.B. *(Augustana Coll.)* 1900
A.M. *(Princeton Univ.)* 1902 SS *Brooklyn, New York*
Hamilton, Clyde Carney—Scholar in Entomology
B.S. *(Kansas State Agr. Coll.)* 1913 — *Halton, Kansas*
Handling, William Clyde—Zoology
A.B., 1909 SS *Lake Fork*
Hanford, Alfred Chester—Political Science
A.B., A.M., 1912, 1913 — *Carbondale*
Hanford, Wesley Wallace—Sanitary Chemistry
B.S., *(Wesleyan Univ.)* 1913 — *Middletown, Connecticut*
Hanger, James Howard—Education
A.B. *(Baker Univ.)* 1910
A.M. *(Univ. of Kansas)* 1911 (SS) *Rossville, Kansas*
Hansen, Roy—Agronomy
B.S., 1914 SS *Rock Island*
Hanson, Frank Blair—Fellow in Zoology
A.B. *(George Washington Univ.)* 1913 (SS) *Bloomington*
Harbarger, Sada Annis—English
A.B. *(Ohio State Univ.)* 1906
A.M.,1909 — *Columbus, Ohio*
Harder, Oscar Edward—Fellow in Industrial Chemistry
A.B., A.M. *(Univ. of Oklahoma)* 1910, 1911 — *Urbana*
Harlan, Charles Leroy—Education
A.B. *(Indiana Univ.)* 1912 SS *Connersville, Indiana*
Harper, Claude—Animal Husbandry
B.S. *(Purdue Univ.)* 1914 — *Ligonier, Indiana*
Harrison, Bernice—Education
A.B., 1912 — *Champaign*
Harsch, Eugene Milton—Botany
A. B. *(Bradley Inst.)* — *Peoria*
Harshbarger, James Francis—Education
A.B., 1913 SS *Arcola*
Hatfield, William Durrell—Chemistry
B.S. *(Illinois Coll.)* 1914 (SS) *Jacksonville*

*Candidate for professional degree in engineering.

Head, Jerome Reed—English A.B. *(Univ. of Wisconsin)* 1914		*Madison, Wisconsin*
Hebbert, Clarence Mark—Mathematics B.S. *(Otterbein Univ.)* 1911 M.S., 1914		*Bloomdale, Ohio*
Heck, Arthur Floyd—Agronomy B.S., 1913		*Urbana*
Hedlund, Mauritz—Mathematics B.S., M.S. *(Dartmouth Coll.)* 1912, 1913	(SS)	*Worcester, Massachusetts*
Heffernan, Ruth Marie—Scholar in English A.B. *(Illinois Wesleyan Univ.)* 1914		*Bloomington*
Heimburger, Harry Virl—Zoology A.B. *(De Pauw Univ.)* 1911		*Kewanna, Indiana*
Hendel, Robert Walter, Jr.—Scholar in Chemistry B.S. *(Lombard Coll.)* 1914		*Colchester*
Henry, Theodore Spafford—Education A.B. *(Hedding Coll.)* 1903	SS	*Havana*
Hepburn, Nelson William—Dairy Husbandry B.S., 1907	SS	*Genoa*
Hess, Raymond Washington—Organic Chemistry A.B. *(Morningside Coll.)* 1912 A.M., 1914		*Champaign*
Higgins, George Marsh—Zoology B.S. *(Knox Coll.)* 1914		*Des Plaines*
Hill, Charles Francis—Physics A.B., 1914		*Toledo*
Hinds, Milford Everett—Bacteriology B.S. *(Northwestern Univ.)* 1912 M.S., 1914	(SS)	*Peotone*
Hjort, Axel Magnus—Organic Chemistry A.B., 1914	(SS)	*Chicago*
Hodsdon, Ruth Elizabeth—History A.B. *(Oberlin Coll.)* 1913		*Lyndon*
Hoerner, Frank A—Psychology (Work for A. B. completed)		*Peotone*
Hofacker, Olga Vera—English A.B. *(Carroll Coll.)* 1907	SS	*Peoria*
Hofto, Jacob Arnold—Western History A.B., A.M. *(Univ. of North Dakota)* 1913, 1914		*Grand Forks, North Dakota*
Holley, Charles Elmer—Fellow in Education A.B., A.M., 1912, 1913	(SS)	*Franklin Grove*
Hoskinson, Ottis—Education A.B. *(Union Christian Coll.)* 1900	SS	*Merom, Indiana*
Howard, Joseph Whitney—Fellow in Chemistry A.B. *(Shurtleff Coll.)* 1912 A.M., 1913		*Upper Alton*
*Howell, Leslie Dillon—Architecture B.S., 1907		*Tacoma, Washington*
Howell, Lloyd Brelsford—Chemistry A.B. *(Wabash Coll.)* 1909	(SS)	*Urbana*
Hsu, Chuan-ying—Railway Administration A.B. *(Nanking Univ.)* 1905		*Chih Chow, China*
Hsü, Tsung Han—Geology A.B., 1914		*Shantung, China*
Huddleston, Samuel David—Education A.B. *(Shurtleff Coll.)* 1911		*Gillespie*
Huenink, Henry Lawrence—Sanitary Chemistry A.B. *(Carroll Coll.)* 1911 M.S., 1913		*Cedar Grove, Wisconsin*
Hull, Anna Leo—American History A.B., A.M., 1910, 1914		*Urbana*
Hunter, William Columbus—Economics A.B. *(Princeton Univ.)* 1905 A.M. *(Harvard Graduate School)* 1911	SS	*Paris*
Hursh, Ralph Kent—Ceramics B.S., 1908		*Urbana*
Hurst, Lawrence—American History A.B. *(Indiana Univ.)* 1910 A.M. *(Wisconsin Univ.)* 1914		*Martinsville*
Hyslop, William Henry—Physics A.B. *(Knox Coll.)* 1908 A.M., 1911		*Galesburg*
Jackson, Eva Jane—Household Science A.B., 1912	SS	*Champaign*
Janson, John Möller—Physiological Chemistry A.B., 1914	(SS)	*East Orange, New Jersey*
Jennings, Walter Wilson—History (Work for A. B. completed)		*Champaign*
Jerdan, Arlandus Leon—Scholar in Animal Husbandry B.S. *(Univ. of Missouri)* 1914		*Red Bay, Alabama*

*Candidate for professional degree in engineering.

Jewell, Minna Ernestine—Scholar in Zoology
A.B. *(Colorado Coll.)* 1914 — *Colorado Springs, Colorado*
Johnston, Joseph Henry—Educational Administration
A.B., A.M. *(Univ. of North Carolina)* 1910, 1914 — *Chapel Hill, North Carolina*
Jones, Easley Stephen—English
A.B., A.M. *(Univ. of Colorado)* 1907, 1909
A.M. *(Harvard Univ.)* 1913 — *Urbana*
Jones, Lloyd Theodore—Physics
A.B. *(Lake Forest Coll.)* 1909
M.S., 1912 — *Raymond*
Jordan, Harvey Herbert—Theoretical and Applied Mechanics
B.S. *(Univ. of Maine)* 1910 (SS) — *Waltham, Maine*
Kamm, Oliver—Organic Chemistry
B.S., M.S., 1911, 1913 (SS) — *Highland*
Karr, Walter Gerald—Chemistry
B.S. *(Alfred Univ.)* 1913 — *Almond, New York*
Karrer, Sebastian—Physics
A.B., A.M. *(Univ. of Washington)* 1911, 1913 (SS) — *Roslyn, Washington*
Kean, Hugh Pratt—Mathematics
A.B. *(Albion Coll.)* 1906
A.M., 1909 — *Urbana*
Keller, Oliver Arnold—Dairy Bacteriology
B.S. *(Purdue Univ.)* 1910 — *Urbana*
Keller, Robert Browder—Mechanical Engineering
B.S. *(Purdue Univ.)* 1908 — *Louisville, Kentucky*
Kellogg, Amelia Lucinda—Botany
(Work for A. B. completed) — *Aurora*
Kelso, Ruth—English
A.B., A.M., 1908, 1909 — *Columbus, Ohio*
Kempton, Forrest Ellwood—Botany
B.S. *(Earlham Coll.)* 1906
M.S. *(Univ. of Wisconsin)* 1913 — *Centerville, Indiana*
Kennedy, Luther Eugene—Geology
(Work for A. B. completed) — *Springfield*
Kernall, Morris Johnson—Fellow in Zoology
A.B. *(Univ. of North Dakota)* 1906
A.M., 1914 — *Valley City, North Dakota*
Kessler, James—French
A.B. *(Indiana Univ.)* 1908 — *Portland, Indiana*
Kile, Jessie June—American History
A.B. *(Rockford Coll.)* 1912
A.M., 1914 — *Rockford*
Kindred, James Ernest—Scholar in Zoology
A.B. *(Tufts Coll.)* 1914 — *Dorchester, Massachusetts*
Kingsley, Mary Winship—History
A.B., A.M. *(Tufts Coll.)* 1903 — *Urbana*
Kirk, Elizabeth—Education
A.B., 1909 SS — *Decatur*
Kirkpatrick, Frank Allen—Ceramics
B.S., 1914 — *Unionville, Michigan*
Kirkpatrick, Harold H.—Education
A.B., 1897 SS — *Le Roy*
Kirshman, John Emmett—Fellow in Economics
Ph.B. *(Central Wesleyan Coll.)* 1904
Ph.M. *(Syracuse Univ.)* 1909 — *Fargo, North Dakota*
Knight, Abner Richard—Electrical Engineering
M.E. *(Ohio State Univ.)* 1909 — *Champaign*
Knight, Charles Kelley—Economics
A.B., A.M. *(Ohio Univ.)* 1912, 1913 — *Athens, Ohio*
Kremers, Harry Cleveland—Inorganic Chemistry
A.B. *(Hope Coll.)* 1913 — *Hudsonville, Michigan*
Krieger, Augusta May—German
A.B., 1910 SS — *Peoria*
Lamb, Burley Frank—Fellow in Economics
A.B. *(Albion Coll.)* 1913
A.M., 1914 — *Hillsdale, Michigan*
Lamkey, Ernest Michael Rudolph—Plant Physiology
A.B.,A.M., 1913, 1914 (SS) — *Riverton*
Lantz, Cyrus William—Plant Physiology
A.B., 1913
A.M., 1914 — *Birmingham*
*Large, Aaron Buford—Latin
A.B. *(McKendree Coll.)* 1910 — *East St. Louis*
Lawless, Joseph Conrad—Agronomy
B.S., 1914 — *Carthage*
Layng, Thomas Ernest—Fellow in Industrial Chemistry
A.B., A.M. *(McMaster Univ.)* 1909, 1912 (SS) — *Toronto, Canada*
Leatherman, Marion—Political Science
A.B. *(Cornell Univ.)* 1907 — *Pittsburgh, Pennsylvania*

*Deceased.

LeCato, John Marvin—Botany
A.B. *(Univ. of Michigan)* 1913 SS *Harman, Maryland*
Lee, Henry Rhodes—Industrial Chemistry
A.B. *(Carroll Coll.)* 1914 *Urbana*
Lee, Ma-li—Education
A.B. *(Columbia Univ.)* 1914 (SS) *Nanking, China*
Leslie, Harold Deam—Economics
A.B. *(Ohio State Univ.)* 1914 *Dayton, Ohio*
Lewis, Harry Fletcher—Fellow in Analytical Organic Chemistry
B.S., M.S. *(Wesleyan Univ.)* 1912, 1913 *Pottsville, Pennsylvania*
Lichty, Lester Clyde—Fellow in Mechanical Engineering
B.S. *(Univ. of Nebraska)* 1913 *Carleton, Nebraska*
Linkins, Ralph Harlan—Zoology
A.B. *(Illinois Coll.)* 1911
A.M., 1914 (SS) *Jacksonville*
Loy, Alice Elizabeth—English
A.B. *(McKendree Coll.)* 1912 SS *Effingham*
Lucas, James Burleigh—Inorganic Chemistry
B.S., M.S. *(Virginia Polytechnic Inst.)* 1910, 1913 *Riner, Virginia*
Lukens, William Penn—Fellow in Mechanical Engineering
A.B. *(Swarthmore Coll.)* 1913 *Woodlyn, Pennsylvania*
McCullough, Elzy Vern—Economics
A.B. *(Tarkio Coll.)* 1908 (SS) *Tarkio, Missouri*
McComis, Samuel Jay—Education
LL.B. *(Jefferson Univ.)* 1910 SS *Lacon*
McJohnston, Harrison—Economics
A.B. *(Northwestern Univ.)* 1907 (SS) *Urbana*
McKellogg, Carl Stone—Chemistry
A.B. *(Oberlin Coll.)* 1914 *Oberlin, Ohio*
McKenna, Edward Lawrence—Economics
A.B. *(Columbia Coll.)* 1913
A.M., 1914 *Brooklyn, New York*
McKinney, Henry Theodore—Education
A.B., 1913 SS *Hudgens*
Macfarlane, Wallace—Fellow in Agronomy
B.S. *(Univ. of Utah)* 1910
M.S., 1913 *Logan, Utah*
Magath, Thomas Byrd—Zoology
Ph.B. *(Emory Coll.)* 1913
M.S. *(James Millikin Univ.)* 1914 *Oxford, Georgia*
Manuel, William Asbury—Industrial Chemistry
A.B. *(De Pauw Univ.)* 1912 *Greencastle, Indiana*
Marquis, Stewart Dent—Chemistry
A.B. *(Lake Forest Coll.)* 1911 *Rock Island*
Marshall, Robert Haskell—Mathematics
A.B., 1914 (SS) *Gamaliel, Kentucky*
May, Henry Gustav—Zoology
B.S. *(Univ. of Rochester)* 1913 *Dallas, Oregon*
Mayne, Louis Brawley—English
A.B., 1910 SS *Camden, Indiana*
Meier, Alice—Scholar in German
A.B. *(Northwestern Coll.)* 1914 *Marshall, Minnesota*
Merrill, Harriet Bell—Zoology
B.S., M.S. *(Univ. of Wisconsin)* 1890, 1893 *Milwaukee Wis.*
Metcalf, Herbert Edmond—Zoology
A.B. *(Tufts Coll.)* 1914 *Winchester, Massachusetts*
Miles, Lee Ellis—Horticulture
A.B. *(Wabash Coll.)* 1914 *Crawfordsville, Indiana*
Miller, J. Earll—History
A.B., LL.B. *(Kansas Univ.)* 1910, 1912
A.M., 1913 *Champaign*
Miller, Marie Breese—Scholar in Household Science
B.S. *(Ohio State Univ.)* 1911 *Columbus, Ohio*
Miller, Olive Fiedille—French
A.B., 1914 *Atlanta*
Miller, Wilford Stanton—Education
A.B., A.M. *(Indiana Univ.)* 1910, 1911 *Champaign*
Miller, William Pitt—Dairy Husbandry
B.S., 1901 *Urbana*
Mitchell, Harold Hanson—Chemistry
A.B., M.S., 1909, 1913 (SS) *Urbana*
Mizoguchi, Gundayu—Electrical Engineering
B.S., 1914 *Saga, Japan*
Mizuno, Tsunekichi—Education
A.B. *(Hiroshima Normal Coll.)* 1908 *Tamura, Japan*
Mohlman, Floyd William—Sanitary Chemistry
B.S., M.S., 1912, 1914 *Urbana*
Montgomery, Julian—Fellow in Theoretical and Applied Mechanics
B.S. *(Grayson Coll.)* 1908
C.E. *(Univ. of Texas)* 1913 *Whitewright, Texas*
Moore, Charles Ruby—Electrical Engineering
B.S., E.E. *(Purdue Univ.)* 1907, 1910 *Urbana*

Moore, Laura McAllister—History A.B. *(Indiana Univ.)* 1892	SS	*Terre Haute, Indiana*
Morkel, William Algernon Kingswill—Animal Husbandry Diploma *(Gov't Agr. Coll., S. Africa)*		*Cape Town, S. Africa*
Mosher, Edna—Fellow in Entomology B.S.A. *(Cornell Univ.)* 1908 M.S., 1913	(SS)	*Kempt Shore, Nova Scotia*
Muncie, Fred Weaver—Organic Analytical Chemistry A.B. *(Wabash Coll.)* 1910 M.S., 1913	(SS)	*Paris*
Murray, Forest H—Mathematics (Work for A. B. completed)		*Mason*
Myers, John T—Chemistry Ph.B. *(Central Wesleyan Coll.)* 1909	SS	*Gibson City*
Myers, Odessa Madge—Scholar in Classics A.B., 1914		*Mansfield*
Nathanson, Jonas Bernard—Physics A.B. *(Ohio State Univ.)* 1912 A.M., 1913	(SS)	*Toledo, Ohio*
Nebel, Merle Louis—Fellow in Mining Engineering B.S., 1913	(SS)	*Urbana*
Neill, Alma Jessie—Physiology A.B., 1913		*Chillicothe*
Nelson, Ralph A—Inorganic Chemistry (Work for B. S. completed)		*Chicago*
Nevens, William Barbour—Dairy Husbandry B.S. *(Univ. of Wisconsin)* 1914		*Urbana*
Newell, Anna Grace—Fellow in Entomology A.B., A.M. *(Smith Coll.)* 1900, 1908		*Northampton, Massachusetts*
Newell, Clyde Ross—Sanitary Engineering Ph.B., M.S. *(Yale Univ.)* 1910, 1912		*Milford, Connecticut*
Newlin, Charles Ivan—Animal Husbandry B.S., 1912 M.S., 1914	SS	*Urbana*
Nickoley, Edward F.—Economics A.B., 1898		*Beirût, Syria*
Nickoley, Emma May Rhoads—English A.B., 1899		*Beirût, Syria*
Niederman, Gertrude—Chemistry B.S., M.S., 1908, 1914	(SS)	*Chicago*
Niver, Roe—Entomology (Work for A. B. completed)		*North Fairfield, Ohio*
Ogawa, Yousabu—Architecture B.S. *(Univ. of California)* 1914		*Berkeley, California*
Okey, Ruth Eliza—Scholar in Chemistry B.S. *(Monmouth Coll.)* 1914		*Kirkwood*
Orcutt, Arthur Henry—Physiology A.B., B.S., 1914		*Arcola*
Ossa, Louis Lorca—Electrical Engineering E.E. *(Univ. of Chile)* 1911		*Santiago, Chile*
Owens, Raymond William—Scholar in Electrical Engineering B.S., 1914		*Morris*
Paine, Olive Allen—Education A.B., 1914		*N. Woodstock, Connecticut*
Palm, Franklin Charles—Scholar in History A.B. *(Oberlin Coll.)* 1914		*Wellman, Minnesota*
Parr, Rosalie Mary—Botany A.B., A.M., 1906, 1911	(SS)	*Urbana*
Partridge, Newton Lyman—Pomology B.S., M.S., 1913, 1914		*Chicago*
Pasmore, Daniel Frederick—Fellow in German A.B. *(Albion Coll.)* 1913 A.M., 1914		*Swartz Creek, Michigan*
Pearson, Frank Ashmore—Economics B.S.A. *(Cornell Univ.)* 1912		*Beaver Falls, Pennsylvania*
Peltier, George Leo—Botany A.B. *(Univ. of Wisconsin)* 1910 A.M. *(Washington Univ.)* 1912	(SS)	*Grand Rapids, Wisconsin*
Perry, Winifred Almeda—English A.M., 1914		*Cornell*
Petersen, Elmore—Economics A.B., B.Com. *(Univ. of South Dakota)* 1911		*Vermilion, South Dakota*
Peterson, Alvah—Entomology B.S. *(Knox Coll.)* 1911 A.M., 1913	(SS)	*Galesburg*
Phelps, James Manley—English A.B. *(Northwestern Univ.)* 1912		*De Kalb*
Phillips, John Breen—Education A.B., 1912	SS	*Sullivan*
Pickler, William Eugene—Botany A.B. *(Wabash Coll.)* 1914		*Louisville, Kentucky*

*Pierce, Raymond Clark—Civil Engineering B.S., 1909		*Genoa*
Pinkerton, Matilda Irvine—History A.B. *(Monmouth Coll.)* 1910	SS	*Monmouth*
Pinkney, Leslie Arthur—Scholar in Physics A.B. *(Wheaton Coll.)* 1910		*Sterling*
Pogue, Robert Bedford—Fellow in Railway Engineering B.M.E. *(Kentucky State Univ.)* 1913		*Lexington, Kentucky*
Porter, Francis Marion—Physics B.S. *(Ohio Univ.)* 1907 M.S., 1911		*Urbana*
van der Post, Andreas Petrus—Animal Husbandry B.S. *(Cornell Univ.)* 1915		*Phillippolis, S. Africa*
Potterf, Loran Ogdan—Organic Chemistry A.B., A.M. *(Miami Univ.)* 1909, 1910		*Eaton, Ohio*
Prasil, Anton—Animal Chemistry B.S., 1914		*Berwyn*
Pung, William Sing-Chong—Railway Civil Engineering B.S., 1914		*Honolulu, Hawaii*
Randolph, Oscar Alan—Physics B.S. *(Missouri School of Mines)* 1911 M.S., 1913	(SS)	*Urbana*
Read, John William—Agronomy B.S., M.S. *(Univ. of Missouri)* 1907, 1908		*Columbia, Missouri*
Read, Mason Kent—Stratigraphic Geology B.S. *(Denison Univ.)* 1914		*Springfield, Ohio*
*Reeder, Claude Hazlett—Electrical Engineer B.S., 1910		*Chicago*
Rees, Charles Christian—Botany A.B. *(Wabash Coll.)* 1913	(SS)	*Rochester, Indiana*
Rees, Edwin Arthur—Organic Chemistry A.B., A.M. *(Univ. of Denver)* 1913, 1914		*Garfield, Utah*
Reid, Ernest Alexander—Scholar in Electrical Engineering B.S., 1914		*Deer River, Minnesota*
Richardson, Clarence Hudson—Mathematics B.S. *(State Univ. of Kentucky)* 1913	SS	*Buffalo, Kentucky*
Richart, Frank Erwin—Scholar in Civil Engineering B.S., 1914		*Urbana*
Roberts, Elmer—Genetics B.S., 1913	(SS)	*Urbana*
Rolfe, Amy Lucile—Education A.B., 1908		*Champaign*
Rogers, Anna Sophie—Psychology A.B., A.M., 1911, 1914		*Bushnell*
Ross, Clarence Samuel—Geology A.B., 1913		*Champaign*
Ross, John Carl—Chemistry A.B. *(South Africa Coll.)* 1911	(SS)	*Cape Town, South Africa*
Rowland, Floyd Elba—Industrial Chemistry B.S. *(Oregon Agr. Coll.)* 1907 A.B., 1914	(SS)	*Corvallis, Oregon*
Roy, Surya Kauba—Dairy Bacteriology B.S., 1914		*Lucknow, India*
Ruehe, Harrison August—Dairy Bacteriology B.S., 1911		*Waukegan*
Rugg, Harold Ordway—Education B.S., C.E. *(Dartmouth Coll.)* 1908, 1909		*Urbana*
Russell, Frederic Arthur—Economics A.B., A.M. *(Albion Coll.)* 1908, 1909	(SS)	*Urbana*
Russell, Robbins—Scholar in Chemistry B.S. *(Illinois Coll.)* 1914	(SS)	*Jacksonville*
Rutledge, George—Fellow in Mathematics A.B., 1910		*Champaign*
Sabin, Ethel Ernestine—Fellow in Philosophy A.B., A.M. *(Univ. of Wisconsin)* 1908, 1914		*Madison, Wisconsin*
Salisbury, George Washington—Agronomy (Work for B.S. completed)		*Astoria*
Samuels, Alexander Felix—Physics A.B. *(Univ. of Wisconsin)* 1910		*West Salem, Wisconsin*
Sayre, Rollo Clifton—History B.S. *(McKendree Coll.)* 1909	SS	*Grayville*
Schaarmann, Emil Ferdinand—German A.B., 1914		*Edgington*
Schoepperle, Katherine—History *(University of Munich)*		*Hamburg, New York*
Scholl, Clarence—Fellow in Sanitary Chemistry B.S., M.S., 1913, 1914	(SS)	*Watseka*
Schoonover, Warren Rippey—Agronomy B.S. *(Occidental Coll.)* 1912		*Alhambra*
Seely, Fred B—Theoretical and Applied Mechanics B.S. *(Worcester Polytechnic Inst.)* 1907		*Urbana*

*Candidate for professional degree in engineering.

Sekine, Sentaro—Railway Engineering
B.S., A.B., 1913, 1914 — *Saitama, Japan*
Senay, Charles Timothy—Fellow in Zoology
B.S. *(Trinity Coll.)* 1914 — *New London, Connecticut*
Sharp, Bertha Lee—Political Science
A.B., 1914 — *Urbana*
Sharp, Gretchen Ada—English
A.B. *(Eureka Coll.)* 1913 — SS *Eureka*
Shepard, Albert Durand—Animal Chemistry
B.S. *(South Dakota State Coll.)* 1914 — *Brookings, South Dakota*
Shiner, Robert Tobias—Animal Husbandry
B.S. *(Univ. of Missouri)* 1914 — *Braymer, Missouri*
Shum, Num Chi—Chemistry
B.S., 1915 — *Canton, China*
Simonich, John Lawrence—Electrical Engineering
B.S., 1914 — *Joliet*
Skews, Helen—Geology
A.B. *(Northwestern Univ.)* 1913 — *Urbana*
Skinner, Glenn Seymour—Organic Chemistry
A.B., 1914 — (SS) *Cherokee, Kansas*
*Sluss, Alfred Higgins—Mechanical Engineering
B.S., 1901 — *Lawrence, Kansas*
Smith, Guy Watson—Mathematics
B.S., M.S. *(Univ. of Colorado)* 1908, 1909 — *Castle Rock, Colorado*
Smith, Rose—Botany
A.B., 1911 — SS *Gibson City*
Snider, Earl Quinter—Entomology
A.B., 1906 — SS *Urbana*
Snider, Howard J.—Agronomy
B.S., 1913 — *New Richmond, Ohio*
Spindler, George Washington—German Literature
A.B., A.M. *(Univ. of Indiana)* 1900, 1908 — *Woodland, Michigan*
*Standish, Seymour—Civil Engineering
B.S., 1910 — *Chicago*
Stanford, Howard Russell—Agronomy
B.S., 1908 — *Champaign*
Stanley, Thomas Blaine—English Literature
A.B. *(Earlham Coll.)* 1913 — *Noblesville, Indiana*
Stanton, William Macy—Architecture
B.S., M.S. *(Univ. of Pennsylvania)* 1913, 1914 — *Philadelphia, Pennsylvania*
Stark, Robert Watt—Agronomy
B.S., 1895 — *Urbana*
*Stein, Milton Frederick—Municipal and Sanitary Engineering
B.S., 1909 — *Chicago*
Stevens, Wayne Edson—Fellow in History
A.B. *(Knox Coll.)* 1913
A.M., 1914 — *Avon*
Stevenson, Newton Newman—Education
A.B. *(McKendree Coll.)* 1907 — SS *Bement*
Stewart, Charles Leslie—Fellow in Economics
A.B. *(Illinois Wesleyan Univ.)* 1911
A.M., 1912 — *Bloomington*
Stewart, Harold Wilson—Agronomy
B.S., 1909 — *Urbana*
Stiegelmeier, Lilly—History
B.S. *(Illinois Wesleyan Univ.)* 1912 — *Bloomington*
Stinson, Mary Edna—Mathematics
A.B. *(Western Coll. for Women)* 1909 — SS *Champaign*
Storer, James—Geology
A.B., A.M. *(Cornell Univ.)* 1912, 1914 — *Buffalo, New York*
Streeter, Floyd Benjamin—Fellow in History
A.B., A.M. *(Univ. of Kansas)* 1911, 1912 — *Urbana*
*Stromquist, Walter Gottfrid—Civil Engineering
A.B. *(Bethany Coll.)* 1905
B.S., 1910 — *Chicago*
Stunkard, Horace Wesley—Fellow in Zoology
B.S. *(Coe Coll.)* 1912
A.M., 1914 — *Walker, Iowa*
Sutcliffe, Emerson Grant—English
A.B. *(Harvard Univ.)* 1911
A.M., 1914 — *Urbana*
Swanson, Frederick Curtis—Scholar in History
A.B., 1914 — *Urbana*
Sweney, Merle A.—English
A.B. *(Hedding Coll.)* 1913 — *Prairie City*
Talbot, Kenneth Hammet—Civil Engineering
B.S., 1909 — *Pittsburgh, Pennsylvania*
Tanner, Fred Wilbur—Bacteriology
B.S. *(Wesleyan Univ.)* 1912
M.S., 1914 — (SS) *Urbana*

*Candidate for professional degree in engineering.

Tao, Wen Tsing—Political Science
(University of State of New York) — *Nanking, China*
Taylor, Everett Harvey—Chemistry
A.B., 1913 (SS) *Lancaster, Wisconsin*
Taylor, Scott Champlin—Industrial Chemistry
B.S., 1913 *Bement*
TerKeurst, Henry Daniel—Scholar in Education
A.B. *(Hope Coll.)* 1914 *Hamilton, Michigan*
Thomas, Della May—Latin
A.B. *(Oberlin Coll.)* 1884 *Owensboro, Kentucky*
Tieje, Ralph Earle—English
A.B., A.M., 1910, 1912 *Urbana*
Tinsley, Raymer Wendell—Scholar in German
A.B. *(Univ. of Kentucky)* 1902 *Hartford, Kentucky*
Tippet, Ralph Waldo—Chemistry
A.B. *(Lawrence Coll.)* 1913 *Appleton, Wisconsin*
Turley, Robert Edgar—Scholar in Theoretical and Applied Mechanics—B.S., 1913 *Richmond, Kentucky*
Valentine, Howard De Witt—Chemistry
B.S., 1913 *River Forest*
VanDoren, Mark Albert—Scholar in English
A.B., 1914 *Urbana*
Virmani, Devi Dyal—Chemistry
A.B. *(Stanford Univ.)* 1913 (SS) *Bahawalpore, India*
Vollweiler, Ernest Henry—Organic Chemistry
A.B. *(Miami Univ.)* 1914 *Shandon, Ohio*
Waggoner, Harry Dwight—Plant Physiology
A.B., A.M., 1909, 1914 (SS) *Urbana*
Waldo, Edward Hardenbergh—Electrical Engineering
A.B. *(Amherst Coll.)* 1888
M.E. *(Cornell Univ.)* 1890
M.S., 1913 *Urbana*
Walker, David E—Education
A.B. *(Lake Forest Coll.)* 1912 SS *De Kalb*
Walworth, Edward Harvey—Agronomy
B.S., 1913 *Urbana*
Warden, Ida Elizabeth—German Literature
Ph.B., A.M. *(Wooster Coll.)* 1906, 1913 *Bellaire, Ohio*
Wardrop, Malcolm Seth—Sociology
A.B. *(Univ. of Mich.)* 1914 *Mt. Pleasant, Michigan*
Warner, Earle Horace—Physics
A.B. *(Univ. of Denver)* 1912
A. M., 1914 (SS) *Urbana*
Watkins, Gordon—Scholar in Sociology
A.B. *(Univ. of Montana)* 1914 *Joliet*
Watson, Minnie Elizabeth—Fellow in Zoology
A.B. *(Olivet Coll.)* 1909
M.S., 1913 *Oyster Bay, New York*
Watson, Perley Melvin—Education
A.B., 1914 SS *Prairie Creek, Indiana*
Weeter, Harry Montgomery—Dairy Bacteriology
A.B. *(Allegheny Coll.)* 1911 *Fredell, Pennsylvania*
Weiland, Henry Joseph—Chemistry
B.S. *(Univ. of Rochester)* 1913 *Pittsford, New York*
Wells, Morris Miller—Fellow in Zoology
B.S. *(Univ. of Chicago)* 1912 *Champaign*
Welo, Lors Alvin—Physics
B.S. *(North Dakota Agr. Coll.)* 1911 *Church's Ferry, No. Dakota*
Wesenberg, Thor Griffith—Romance Languages
A.B., A.M. *(Univ. of Pennsylvania)* 1910, 1911 *Philadelphia, Pennsylvania*
Westergaard, Harold Malcolm—Engineering Mechanics
B.S. *(Royal Tech. Coll., Copenhagen)* 1911 *Copenhagen, Denmark*
Westhaefer, Terrence Onas—Chemistry
A.B. *(Univ. of Oklahoma)* 1914 *Buffalo, Oklahoma*
Whisenand, James Wilbur—Animal Husbandry
B.S. *(Univ. of Nebraska)* 1914 *Harvard, Nebraska*
White, Leila Olive—Scholar in History
A.B. *(Rockford Coll.)* 1914 *Rockford*
Whitford, Robert Calvin—English
A.B. *(Coll. of the City of New York)* 1912
A.M. *(Columbia Univ.)* 1913 *New York City*
Wichers, Edward—Inorganic Chemistry
A.B. *(Hope Coll.)* 1913 *Zeeland, Michigan*
Wildman, Ernest Atkins—Organic Chemistry
B.S. *(Earlham Coll.)* 1912
M.S., 1914 *Whittier, California*
Wiley, Neva Beryl—History
A.B. *(Illinois Woman's College.)* 1910 *La Place*
Williams, Arthur Edwards—Ceramics
B.S., 1910 *Urbana*
Williams, Kathryn—Scholar in Classics
A.B. *(Carthage Coll.)* 1914 *Ft. Stockton, Texas*
Williams, Roy Arlyn—Education
A.B. *(De Pauw Univ.)* 1912) SS *Bismarck*

Wilson, Lola Elsie—Latin
A.B. *(Hanover Coll.)* 1912 — *Neoga*
Wilson, William Harold—Mathematics
A.B. *(Albion Coll.)* 1913
A.M., 1914 — *Champaign*
Winkelmann, Herbert August—Scholar in Chemistry
B.S. *(North-Western Coll.)* 1914 — *Appleton, Minnesota*
Winslow, Joseph Charles—Bacteriology
A.B. *(Univ. of Wisconsin)* 1914 — *Omro, Wisconsin*
Wiseman, Esther Grace—Scholar in English
A..B *(Shurtleff Coll.)* 1914 — *Mound Valley, Kansas*
Wollenhaupt, Walter Franz—Education
Ph.B. *(Iowa Wesleyan Univ.)* 1908 — SS *Villa Grove, Iowa*
Wright, Phillip Quincy—Fellow in Political Science
A.B. *(Lombard Coll.)* 1912
A.M., 1913 — *Galesburg*
Wright, Albert Byard—Political Science
B.S., A.M. *(Illinois Wesleyan Univ.)* 1907, 1910
A.M., 1914 — SS *Wenona*
Wyatt, Frank Archibald—Fellow in Agronomy
B.S. *(Agr. Coll. of Utah)* 1910
M.S., 1913 — *Wellsville, Utah*
Yapp, William Wodin—Genetics
B.S., M.S., 1911, 1914 — *Urbana*
Yoke, John Jonathan—Animal Husbandry
B.S., 1914 — *Urbana*
Young, Esther—Scholar in Botany
A.B. *(Miami Univ.)* 1914 — *Indianapolis, Indiana*
Young, Everett Gillham—Fellow in Railway Engineering
B.S., 1913 — *Denver, Colorado*
Young, Lewis Emanuel—Fellow in Economics
B.S. *(Pennsylvania State Coll.)* 1900
E.M. *(Iowa State Coll.)* 1904 — *Champaign*
Young, Yungyen—Botany
B.S., A.B., M.S., 1913, 1914 — *Nanziang, China*
Zeis, Henry Charles—Mathematics
A.B., 1913 — *Champaign*
Zimmerman, Robert Paul—German
A.B., 1913 — *Champaign*
Zucker, Adolf Eduard—German
A.B., A.M., 1912, 1914 — *Ft. Wayne, Indiana*

UNDERGRADUATE AND PROFESSIONAL COLLEGES AND SCHOOLS IN URBANA

(Including the Colleges of Liberal Arts and Sciences, Engineering, Agriculture, and Law, the Library School, and the School of Music)

ABBREVIATIONS

Courses

A	Arcitecture	L	Law
AE	Architectural Engineering	LAS	General Liberal Arts and Sciences
Agr	Agriculture	Lb	Library Science
Bus	Business	Med	Medical Preparatory
CE	Civil Engineering	ME	Mechanical Engineering
Cer	Ceramics	MnE	Mining Engineering
CerE	Ceramic Engineering	MSE	Municipal and Sanitary Engineering
Ch	Chemistry	Mus	Music
ChE	Chemical Engineering	RCE	Railway Civil Engineering
EE	Electrical Engineering	REE	Railway Electrical Engineering
HSAgr	Household Science, Agriculture	RME	Railway Mechanical Engineering
HSLAS	Household Science, Liberal Arts and Sciences	SS	Summer Session

Name	Course	Credit Hours*	Residence
Abbott, Edwin Irving	*Agr*		*Berwyn*
Abbott, Howard Green	*Agr*		*Morrison*
Abbott, Robert Edward	*LAS*		*Chicago*
Abney, M. D., A.B.,1912	*SS*	*130*	*Harrisburg*
Abraham, Effie Gale, A.B. *(Miami Univ.)* 1913	*Lb*		*Muncie, Indiana*
von Ach, Frank	*Bus*		*Davenport, Iowa*
Ackerson, Esther Mae	*HSLAS*	*33*	*Westfield, Indiana*
Ackert, Alice Nowell	*HSAgr*		*Dixon*
Adams, Allan Madison	*Agr*	*32*	*Urbana*
Adams, Ethel Irene	*Mus*		*Buffalo, Wyoming*
Adams, Joseph James	*Agr*	*26*	*Urbana*
Adams, Mary Olena	*LAS*		*Tipton, Missouri*
Adams, Pauline Hopkins	*LAS sp*	*55*	*Grand Rapids, Michigan*
Adelsberger, Bransford Louis	*Med*		*Waterloo*
Adler, Leon	*ChE*	*48*	*St. Louis, Missouri*
Agg, Sarah	*HSAgr (SS)*	*36*	*Urbana*
Agnew, Beulah Irene	*LAS*	*31*	*Villa Grove*
Ainsworth, Harry Francis	*Agr (SS)*	*98½*	*Greensburg, Indiana*
Ainsworth, Harry Gregory	*Agr*	*126*	*Mason City,*
Ainsworth, Joseph Homer	*Agr*		*Havana*
Ainsworth, Madeline Zelonica	*LAS*		*Chicago*
Ainsworth, William Howard	*Agr*		*Mason City*
Alband, Laura Anna	*HSLAS*	*97*	*Streator*
Albaugh, Hazen Lowell	*Bus*	*32½*	*Edmore, Michigan*
Albee, Chester Leon	*Agr*	*31*	*Chicago*
Albert, Harry Delbert	*L*	*50*	*Mansfield*
Albin, Harold Cornelius	*Agr*	*104*	*Washington, D. C.*
Albin, Wilma	*LAS*		*Chicago*
Albrecht, Daniel Arthur	*LAS (SS)*	*64*	*Champaign*
Albright, Joseph Clarence	*ME*	*36*	*Attica, Indiana*
Alcock, Warren Joseph	*ME*	*4*	*Chicago*
Alexander, Grace Elizabeth	*LAS*	*102½*	*Chicago*
Alexander, Hazel Johnson	*LAS sp*		*Indianapolis, Indiana*
Alexander, John Alva	*SS*	*114½*	*Mansfield*
Allais, Eugene	*LAS*	*62*	*Du Quoin*
Allan, Carlisle Visscher	*A*		*Omaha, Nebraska*
Allard, Hazel Bentley	*LAS*	*33*	*Quincy*
Allard, Maurine	*Mus*	*26*	*Quincy*
Allen, A. A.	*SS*		*Pesotum*
Allen, Alice Alexandria	*HSLAS*	*94*	*Urbana*
Allen, Ernest Victor	*MnE*	*92½*	*Pana*
Allen, Frank Oscar	*LAS (SS)*	*70½*	*Clinton*
Allen, George Albert	*LAS*		*Clinton*

*Computed October 1, 1914.

Allen, Harriett Horton	*HSAgr*	*32*	*Delavan*
Allen, Hester Ada	*HSAgr*	*33*	*Delavan*
Allen, Moffett Barrows	*Agr*		*Harristown*
Allen, Otho William	*LAS*	*117*	*Clinton*
Allen, Paul Glen	*LAS*	*84*	*Chicago*
Allen, Thomas Edward	*SS*		*Ashley*
Alley, William Edwin	*SS*	*49*	*Champaign*
Alling, Carlos A. K.	*Bus*		*Chicago*
Allison, Jay Malcolm	*Bus*	*47½*	*Downers Grove*
Allison, Ruth Elizabeth	*LAS*	*75*	*Kirkland*
Allison, Worth Arthur	*Agr*	*85*	*Charleston*
Allyn, Albert Merrell	*AE (SS)*	*97½*	*Grants Pass, Oregon*
Allyn, Hester Anne	*HSLAS*	*32*	*Modesto*
Almond, Harry Havens	*LAS*	*38*	*Anderson, Indiana*
Alt, Frank Henry, Jr.	*Agr*		*Chicago*
Alverson, Ruth Amelia	*LAS*		*Urbana*
Alverson, Verna May	*SS*	*23*	*Urbana*
Alvord, Genevieve Raymond	*LAS*	*64*	*Urbana*
Alwood, Clyde Gobel	*Agr*	*30*	*Clinton*
Alyea, Melvil Carlyle	*Agr*	*97*	*Earlville*
Amborn, Louise	*LAS*	*65*	*Ft. Madison, Iowa*
Ambroz, Ambrose Otto	*LAS sp*		*Cedar Rapids, Iowa*
Ambruster, John Rea	*Agr*	*33*	*Chicago*
Ames, Albert Gaidner	*LAS*		*Riverside*
Ames, Waldo Boynton	*Bus*	*20*	*Oak Park*
Amos, Douglas Jacques	*Agr (SS)*	*65*	*Cairo*
Amsbary, Paul Donald	*A*	*68*	*Urbana*
Anastassiades, Ernest	*CE*		*Kirk-Kilisse, Turkey*
Anderle, Emil Joseph, B.S., 1914	*LAS*	*138*	*Chicago*
Anderson, Benjamin Franklin	*L*	*87*	*Charleston*
Anderson, Carl Leonard	*A*		*Hudson, Wisconsin*
Anderson, Charles Patrick	*Bus*		*Chicago*
Anderson, Charles Wesley	*Cer*	*33½*	*Dixon*
Anderson, Clarence	*EE*		*Taylorville*
Anderson, Clarence Joseph	*Bus*	*110½*	*Princeton*
Anderson, Frank Andrew	*Agr sp*		*Smithshire*
Anderson, Irving	*MSE*	*129*	*Galesburg*
Anderson, Joshua Clayton	*Agr (SS) sp*	*84½*	*Champaign*
Anderson, Mrs. Myrtle Zeress	*SS*		*Champaign*
Anderson, Nita Jeannette	*SS*		*Highland Park*
Anderson, Olive Matilda	*HSAgr*	*30*	*Chicago*
Anderson, Owen Huntington	*ME*	*67*	*DeKalb*
Anderson, Perry John	*Bus*		*Urbana*
Anderson, Roy B.	*Agr*		*Winnebago*
Anderson, Walker Whitcomb	*A (SS)*	*114½*	*Holder*
Anderson, William French	*Agr*	*100½*	*Lake Forest*
Anderson, William Wilson	*Agr*	*60*	*Ohio*
Andresen, Hans Henry Louis	*A*	*110*	*Chicago*
Andrews, Harry Lee	*LAS(SS)*	*81*	*Washburn*
Andrews, John Asa	*Agr*	*99*	*Walnut*
Andrews, Leonard Elmer	*LAS*		*Oak Park*
Andrews, Mary Alberta	*LAS*		*Pana*
Andrews, Nellie Eulalie	*Agr sp*	*22*	*Hebron*
Andrews, Robert Eugene	*Agr*	*7*	*Evanston*
Andrews, Roscoe Crum	*LAS*	*67*	*Mattoon*
Andrews, Thomas Carr	*Bus*		*Woodstock*
Angarola, Michael Louis	*CE*	*112½*	*Chicago*
Antenen, Harry George	*A*	*2*	*Hamilton, Ohio*
Anthony, Elizabeth Virginia	*Mus*	*39*	*Elmhurst*
Antosozewski, Robert Horatius	*Agr*		*Glencoe*
Appelgran, Clarence Oliver	*Agr*	*34*	*Chicago*
Apple, Russell Evans	*Agr*		*Robinson*
Applegate, Annie Mary, A.M., 1909	*SS*		*Atlanta*
Arber, Frederick Verne	*LAS (SS)*	*69½*	*Brimfield*
Arbuckle, Leon	*Agr*	*60*	*Brocton*
Archambeault, Evelain Elaine	*SS*	*8*	*Peshtigo, Wisconsin*
Archambeault, Geraldine Muriel	*SS*	*30*	*Peshtigo, Wisconsin*
Archer, Olin Wellington	*LAS*	*31*	*Peoria*
Archer, Robert Lin	*SS*	*3*	*Prosperity, Pennsylvania*
Arends, Annis Lillian	*LAS*	*29*	*Champaign*
Arends, Arthur	*Agr*	*33*	*Melvin*
Arias, Fenelon	*CE (SS)*	*22½*	*Salta, Argentina*
Armington, Clara Grace	*Mus*		*Dixon*
Armington, Dorothy Maude	*LAS*	*102*	*Dixon*
Armistead, Ambrose Harvey Lindsay	*Agr sp*	*21*	*Norfolk, Virginia*
Armour, Phillips F.	*Bus*	*83*	*Rockford*
Armstrong, Clifford Oakley	*Med*	*64*	*Bloomington*
Armstrong, Della Estelle	*LAS*	*99*	*Newton, Iowa*
Armstrong, Donald Alfonso	*LAS*		*Metropolis*
Armstrong, Elizabeth Emily	*LAS*		*Champaign*
Armstrong, Horace	*Bus*		*River Forest*
Armstrong, John Harold	*Agr*	*33*	*Champaign*
Armstrong, Lennox Francois	*ME*	*109*	*River Forest*

Armstrong, Paul Leo	*LAS*		*River Forest*
Armstrong, Walter Clark	*Agr*	107½	*Chicago*
Arnde, Paul, Jr.	*Agr*		*Decatur*
Arnold, Howard Shaver	*Agr*	25	*Ottawa*
Arthur, Mildred Sylvester	*SS*		*Streator*
Artz, Harry Belmont	*EE*		*Augusta*
Asai, Seiji	*Bus sp*	16	*Kyoto, Japan*
Aschermann, Vade Earl	*EE*	37	*Lavington*
Ashbeck, William Louis	*AE*	83	*Chicago*
Ashley, Laurin S.	*SS*	26½	*Sibley*
Ashman, Oscar Harold	*AE*	34	*Elgin*
Aston, Arthur	*SS*	8	*Urbana*
Atkins, Edward Laurence	*Agr*	116	*Rock Falls*
Atkinson, Donald Samuel Peabody	*Bus*		*Champaign*
Attebery, Hazel	*Bus*		*Hillsboro*
Attebery, Homer Franklin	*Agr*	62	*Hillsboro*
AuBuchon, Joseph Montgomery	*EE*		*St. Louis, Missouri*
Augustus, Lalah Marie	*HSAgr*	47	*Champaign*
Augustus, Ralph Edgar	*Agr*	81½	*Champaign*
Auld, Ernest Roland	*Agr*		*Martinsville*
Austin, Barton Slade, Jr.	*Agr*	103½	*Woodstock*
Austin, Harold Emery	*ME*	110	*Chicago*
Austin, Nola Gertrude	*SS Sp*	4½	*Tallula*
Auten, John Thompson	*Agr*	73½	*White Hall*
Avery, Guy Thomas	*ME*	35½	*Three Rivers, Michigan*
Avery, John Madison, A.B., 1914	*SS*		*Johnston City*
Axelson, Alice Grace	*LAS*	117	*St. Louis, Missouri*
Axline, Edward Springer	*Bus*	33½	*Wenona*
Ayres, Edward Burge	*ME*	34	*Springfield*
Ayres, Lester George	*Bus*	49	*River Forest*
Babbitt, Eleanor	*LAS (SS)*	29½	*Chicago*
Babcock, Basil Philip	*ME (SS)*	35	*Chicago*
Babcock, Dan	*AE*	37	*Anderson, Indiana*
Babcock, Frank Roy	*Bus*	34	*Rockford*
Babcock, Jennie May	*HSLAS*	65	*Danville*
Bacer, Holland Robert	*CerE*	116	*Branxville, New York*
Bach, Bernice	*LAS*		*Chicago*
Bacon, Oliver	*Agr*		*Harlan, Iowa*
Bacon, Robert Hamilton	*EE*		*Pasadena, California*
Bade, Charles Henry	*A*	112	*Lidgerwood, North Dakota*
Badger, Carroll John	*Agr*		*Alamo, Tennessee*
Badger, Eunice Louise	*LAS*		*Riverside*
Baechler, Matilda May	*HSAgr (SS)*	42	*Momence*
Baechtold, Elsie Louise, A.B. *(Grinnell College)* 1911	*Lb*	33	*Talladega, Alabama*
Baer, Paul Wendell	*Agr*		*Oxford, Ohio*
Bagott, Pauline J.	*SS*		*Kinmundy*
Bagusin, Alexis Matthew	*Med (SS)*	101	*Quincy*
Bahr, Mildred Greta	*LAS*		*Ridgefarm*
Bailey, Earl Willis	*CE*		*Boody*
Bailey, John Willard	*A*	135	*Lovington*
Bailey, La Force	*A*	102	*St, Charles*
Bailey, Linus McCowan	*ME (SS)*	37	*Peru, Indiana*
Bain, Wallace Bothwell	*Agr*	57	*Martinsville, Indiana*
Baird, Mont Kersey	*SS*	5	*Indianapolis, Indiana*
Baker, Alfred Michael Mark, Jr.	*Agr*	111½	*St. Louis, Missouri*
Baker, Erwin Frank	*ME sp*		*Denver, Colorado*
Baker, Fred Phelps	*ChE*		*Denver, Colorado*
Baker, Gerald Clifford	*SS*	68	*Bement*
Baker, Harry James	*LAS*	46	*Worthington, Indiana*
Baker, Joseph John	*Agr*		*St. Louis, Missouri*
Baker, Mrs. Lena, A.B. *(Missouri Wesleyan Coll.)* 1898	*Mus*		*Urbana*
Baker, Leon Joseph	*AE*		*Ft. Wayne, Indiana*
Baker, Russell Parks	*Bus*	86	*La Fayette, Indiana*
Baker, Walter Earl	*Bus*	72	*Bement*
Bakhshi, Sarva Rupa	*RCE*	73½	*Srinagar, India*
Balbach, Nyle Jacob	*Bus*	26	*Chenoa*
Balderson, Ted Albert	*AE*	37	*Wilber, Nebraska*
Baldwin, Janet Christine	*SS*	89	*Paris*
Baldwin, Leo Starr	*AE*	146	*Freeport*
Baldwin, Margaret Helen	*HSLAS*	27	*Ottawa*
Balkema, Salome Rose	*LAS (SS)*	65	*Chicago*
Ball, Frederic Dunham	*LAS*		*Clinton*
Ball, George Waldo	*REE (SS)*	72½	*Edison Park, Chicago*
Ball, Mary Elsie	*HSLAS*	31	*Rossville, Indiana*
Ballinger, Emma Matilda	*LAS*	23	*Upper Alton*
Bamesberger, Velda Christena	*LAS*		*Urbana*
Ban, Seizo	*MnE (SS)*	28	*Tokyo, Japan*
Bandy, William Albert	*SS*	3	*Westfield*
Bane, Frank Milton	*Agr*	99	*Pontiac*
Bannister, John Howard	*Agr*		*Kewanee*

Barber, Franklin Brown	*Agr*		*Gibson City*
Barber, Harold William	*Agr*		*La Salle*
Barber, Hillis Elwyn	*Agr*		*La Fox*
Barber, John Kenneth	*LAS*	*51*	*La Fox*
Barber, Wilber Barrett	*EE*	*4*	*Joliet*
Barden, Harold Edward	*EE*	*122*	*S. Pasadena, California*
Bardwell, Anna Laura	*HSLAS*	*83*	*Aurora*
Barger, Leslie Vernon	*SS*		*Danville*
Barker, Byrl Abbott	*Agr*	*103*	*Mazon*
Barker, Edward Franklin	*ME (SS)*	*77*	*Rock Island*
Barker, William Clarke	*Bus*	*31*	*Rock Island*
Barkley, Rupert Randolph	*SS*		*Hazel Dell*
Barkman, Charles Pruden	*LAS (SS)*	*113*	*Princeton*
Barkman, Marcus Glazer	*LAS*		*Princeton*
Barkow, Emory Merill	*Agr*		*Chicago*
Barkstrom, Edward Carl	*ME*	*63*	*Chicago*
Barler, Richard Condon	*Agr*	*23*	*Chicago*
Barlow, Ralph Linden	*L*	*93*	*Urbana, Ohio*
Barlow, Roland Wilcox	*Med*	*7*	*Chicago*
Barman, Somendra Chandra Deb	*Bus*	*103*	*Bengal, India*
Barnes, Allen Littler	*A*		*Urbana*
Barnes, Eleanor	*HSAgr*		*River Forest*
Barnes, Harold John	*A*	*36*	*Joliet*
Barnes, Lillian	*LAS*	*23*	*River Forest*
Barnes, Nelle	*LAS*	*136*	*Urbana*
Barnes, Otis Avery	*ChE*	*74*	*Auburn*
Barnes, Robert Olney	*LAS*	*112*	*Chicago*
Barnes, Russell Daniel	*AE*	*75½*	*Taylorville*
Barnes, Winifred	*Agr*		*Kansas City, Missouri*
Barnett, Clarence James	*Agr-sp*		*Danville*
Barnum, Richard Fyfe	*ME*	*66*	*La Grange*
Barreau, August Matthew	*AE*	*112½*	*Chicago*
Barringer, Edna	*LAS*	*93*	*Coffeen*
Barron, Alexander Fraser	*ME*	*110*	*Chicago*
Barrows, Helen Marie	*HSAgr*	*36*	*Chicago*
Barry, Jennis Eulalia	*LAS*		*Champaign*
Bartels, Nellie Flora	*LAS*	*82*	*Edwardsville*
Barth, Edward Fred	*Agr*	*80½*	*Pana*
Bartholow, James Summerfield	*LAS (SS)*	*71*	*Mt. Vernon, New York*
Bartleson, Agustus Chapman	*LAS*		*Muskogee, Oklahoma*
Bartley, John Solomon	*A*	*72*	*Waterloo, Iowa*
Barto, Harriet Thompson	*HSLAS*	*66*	*Urbana*
Barto, Margaret Murray	*HSLAS (SS)*	*37*	*Urbana*
Barton, Arthur Layton	*L*	*8*	*Cambridge, Vermont*
Bates, Charles William	*Bus*		*Roodhouse*
Batson, John Thaddeus	*ChE*		*Marshall*
Battey, Bradford Reed	*Bus*	*84*	*Tiskilwa*
Bau, Ching-ling	*ME (SS)*	*42½*	*Shanghai, China*
Bauder, Lewis Augustus	*Agr*	*30*	*Berwyn*
Bauer, Elmer Ferdinand	*Agr*		*St. Louis, Missouri*
Beach, Frank Herman	*LAS*	*66*	*Champaign*
Beal, Walter Hubert	*Bus*	*69*	*Moline*
Beall, John Percival	*LAS (SS)*	*111*	*Alton*
Bean, Lillian Bertha	*LAS*	*83*	*Urbana*
Bear, Chester Randall	*Bus*	*12*	*Ludlow*
Beard, Ward Powers	*Agr (SS)*	*105*	*Milledgeville*
Beardsley, Henry Scovell	*Agr*	*15½*	*Kansas City, Missouri*
Beatty, Edward Corbyn Obert	*LAS*	*66*	*Quincy*
Beatty, Owen Chauncey	*Agr*		*Urbana*
Beaubien, Warren Platt	*AE*	*76*	*Whiting, Indiana*
Bebb, Edwin Adams	*Agr*	*73*	*Chicago*
Bebb, Forrest	*Agr*	*70*	*Muskogee, Oklahoma*
Beck, Martha Selma	*LAS*	*93*	*Indianapolis, Indiana*
Beck, Ruth Marie	*LAS*		*Champaign*
Beckemeyer, Harry John	*SS*	*93*	*Beckemeyer*
Beckemeyer, Mary Brown	*SS*	*3½*	*Carlyle*
Becker, Georgia	*Agr sp*		*Bloomington*
Becker, Harry Francis	*Agr sp*	*33½*	*Knoxville*
Becker, Lewis Michael	*ME*	*79*	*Quincy*
Becker, Paul	*ME*	*37*	*Berwyn*
Becker, Walter Henry	*Bus*	*21*	*Chicago*
Beeby, Ruth Alice	*SS*	*38*	*Urbana*
Beers, Otis Edward	*ME*	*51*	*Elkhart, Indiana*
Beggs, Alfonso Franklin	*Agr sp*		*Dongola*
Behel, Vernon Wilbur	*A*	*47*	*Lake Bluff*
Behel, Wesley Arthur	*A*	*36*	*Lake Bluff*
Behr, Herbert Richard	*EE*	*77*	*Chicago*
Behrensmeyer, Helen	*LAS (SS)*	*97½*	*Quincy*
Beidelman, Jennings Clyde	*AE*		*Naperville*
Beifuss, Edwin Louis	*Agr*	*95½*	*Chicago*
Beilin, David Solomon	*Med*	*27½*	*Wilmette*
Beindorf, Paul Albert	*ME*	*53*	*Litchfield*
Bell, Emerson DeWitt	*EE (SS)*	*112½*	*Arcola*

Bell, Harrington Alexander	*Agr*		*Oak Park*
Bell, John Hasle	*CE*		*Rushville*
Bell, Kenneth Corwin	*Bus*	*60*	*Robinson*
Bell, Mary Aurelia	*LAS*	*75*	*Carbondale*
Bell, Neva Frances	*LAS*	*23*	*Urbana*
Bell, Norma Elizabeth	*LAS*	*35*	*West York*
Bell, William McFadden	*Agr*	*79½*	*Buena Vista, Pennsylvania*
Belnap, Nuel Dinsmore, A.B., 1914	*L*	*30*	*Washington, D. C.*
Belshaw, Charles Franklin	*ME*	*75*	*Rockford*
Beltz, John Shafer	*EE*	*74*	*Nickerson, Kansas*
Bench, Stella Louise	*SS*	*71*	*Galena*
Benham, Norman Beach	*ChE*		*Crothersville, Indiana*
Benner, Arthur Jacob	*LAS*	*103*	*Chicago*
Benner, William Jacob	*LAS*	*98*	*Chicago*
Bennett, Arthur Edward	*A (SS)*	*105*	*Chicago*
Bennett, Basil	*Agr*		*Kansas*
Bennett, Emil Cline	*Agr*		*Kansas*
Bennett, Frank Luvern	*Agr (SS)*	*70½*	*Cortland*
Bennett, Hazel Marguerite	*HSLAS*	*68*	*Washington*
Bennett, William Harrison	*LAS*	*116*	*Aurora*
Benson, Arnold Siegfrid	*Med*	*65*	*Batavia*
Benson, Arthur Edward	*A*		*Chicago*
Benson, Lois Pope	*SS*	*72*	*Herrin*
Benson, Mirrell Manning	*Bus*		*Sterling*
Benson, Susie True, A.B. *(Missouri Wesleyan College)* 1909	*Lb*	*88*	*Urbana*
Bentz, Clarence Louis	*AE*	*83*	*Chicago*
Berg, Ben Conrad	*LAS*	*66*	*Crystal Lake*
Berger, Cora	*LAS*		*Davenport, Iowa*
Berger, Irene Mae	*LAS*	*33½*	*South Holland*
Bergeson, Earnest Darwin	*Agr*		*Earlville*
Bergman, Frank	*CE*	*112*	*Chicago*
Berlin, Marie Valentine	*LAS*	*74½*	*Chicago*
Berline, Henry Lee	*Agr*	*32½*	*White Hall*
Berner, Louis Rolland	*Chem.*		*Indianapolis, Indiana*
Bernhardt, Josephine Elizabeth	*LAS*	*63*	*Collinsville*
Bernhardt, Pearl Anna Maria	*HSLAS*	*95½*	*Collinsville*
Berninger, Harriett Josephine	*LAS (SS)*	*116*	*Lancaster*
Berryman, Paul Ruytter	*Bus*		*Downers Grove*
Berwald, Charles Harry	*EE*	*113*	*Dallas, Texas*
Bess, Stanley John	*ME*	*36*	*Rosemond*
Best, Leon Henson	*ME*		*Galva*
Bevis, Albon Ledru	*Bus*	*66½*	*St. Louis, Missouri*
Beyer, Elizabeth Gunder	*HSLAS*	*61*	*Urbana*
Beyer, Vera	*LAS*	*98*	*Urbana*
Beyer, Verne Charles	*EE*		*Princeton*
Biddle, Helen Lucile	*HSLAS*		*Kenton, Ohio*
Bigel, William, Jr.	*Agr*	*48*	*Chicago*
Bigelow, Roy St. Lawrence	*REE*	*34*	*Chicago*
Bigler, Harry Edward	*Bus*	*182½*	*Sigel*
Bilderback, Byron	*Bus*	*10*	*Champaign*
Billman, Elliott	*L*	*28*	*East St. Louis,*
Binder, George Frederick	*Agr (SS)*	*20½*	*Aurora*
Bing, Bertha Helen	*LAS(SS)*	*7*	*Urbana*
Bingham, Arthur Barnes	*Agr*	*96½*	*River Forest*
Bingham, Charles Lathrop	*Bus sp*		*River Forest*
Birch, Robert Featherstone	*L*	*19*	*Geneva*
Birch, Stephen Meserve	*LAS*	*25½*	*Danville*
Birchard, John Wesley	*CerE*	*29*	*Urbana*
Birchard, Leola Mary	*HSAgr*		*Urbana*
Birdsell, Lloyd Burton	*Agr*		*Sterling*
Birks, John Milton	*Agr*		*Cornland*
Bishop, Jessie Elizabeth, A.B. *(Smith Coll.)* 1911	*Lb*		*Evanston*
Bissell, George Francis	*Cer*	*99*	*Winnetka*
Bjelland, Harold Gerhard	*Agr*		*Leland*
Black, Beryl A.	*SS*	*4*	*Paris*
Black, Howard Benjamin, B.S. *(Baldwin Univ.)* 1911	*SS*	*7*	*Massillon, Ohio*
Black, James Hamilton, Jr.	*Bus*		*Terre Haute, Indiana*
Black, Lois Frances	*LAS*	*16*	*Oakland*
Black, Robert Sommerville	*ME (SS)*	*65*	*Mendota*
Black, Ward Norris	*LAS*	*8*	*Palestine*
Blackall, Alfred Harris	*LAS(SS)*	*8*	*Chicago*
Blackstone, Abraham	*CE*		*Chicago*
Blackwell, Mary Lovey	*SS*		*Urbana*
Blackwell, Maude Gwendolyn	*LAS*	*29*	*Atwood*
Blackwell, Michael Joseph	*Agr sp (SS)*	*48*	*Memphis, Tennessee*
Blackwood, Leslie Winslow	*LAS*		*Chicago*
Blaine, Nelle Griffeth	*SS*		*Champaign*
Blair, Edgar Theron	*Med*	*24*	*Chandlerville*

Blake, George Washington	*CE*	*108*	*Maywood*
Blake, Winifred	*HSAgr*	*65*	*Maywood*
Bleisch, Selmar Anton	*L sp*	*28*	*Alhambra*
Bleuel, Marie Teresa	*LAS*	*84*	*Chicago*
Bleuer, Bernard Fred	*Agr*		*Rock Island*
Block, Edward Stevenson	*Agr*	*68*	*Chicago*
Block, Frieda Emma Alvina	*Mus*	*34*	*Champaign*
Block, Jesse LeRoy	*Med*	*32*	*Portland, Oregon*
Blohm, George Charles	*LAS*	*25*	*Chicago*
Bluhm, Harold John	*ChE*	*38*	*Chicago*
Boardman, Curtis Love	*A*		*Hoopeston*
Boardman, Vinson Runyan	*Agr*	*31*	*Hoopeston*
Bockemohle, Clinton L. A.	*AE*	*104½*	*Ellinwood, Kansas*
Bocock, Clyde Logan	*Bus*	*20*	*Urbana*
Boerner, Eugene Sonnenberg	*Agr*	*23*	*Port Washington, Wisconsin*
Boeschenstein, Harold	*LAS*		*Edwardsville*
Boggers, Edith Elliot	*HSAgr (SS)*	*102*	*Catlin*
Boggs, Hsi Fan	*Bus*	*73*	*Shanghai, China*
Boghosian, Melton Horsep	*CE*	*19*	*Teheran, Persia*
Bolen, Mabel Helen	*LAS*		*Kansas City, Missouri*
Boleyn, Charles John	*Agr*		*Oak Park*
Bolinger, Emerson Franklin	*EE*	*77*	*New Holland*
Bollard, Clemma Edith	*LAS*		*Topeka, Kansas*
Bolling, Robert Hill	*Agr*		*Chicago*
Bollinger, Emerson F.	*SS*		*New Holland*
Bollman, Minnie Joanna, A.B., 1910	*Lb*	*51*	*Champaign*
Bolster, Nicholas John	*SS*	*47*	*Buenos Aires, Argentina*
Boltenstern, Nellie	*Mus sp*		*Cambridge*
Boltenstern, William Samuel	*Agr*		*Cambridge*
Bolton, Ralph Waldo	*LAS*	*7½*	*Aledo*
Bolton, Wyman Jesse	*ME*		*Nauvoo*
Bon Durant, Walter Hontoon	*Bus*	*24*	*South Bend, Indiana*
Bone, Maurice Oberlin	*Agr*		*Batavia*
Bonner, Arthur Lee	*ME*		*Champaign*
Boone, Mrs. Bonnie E.	*Mus sp*		*Champaign*
Booth, Chancy LaMott	*Agr*	*16½*	*Onarga*
Booth, Earl Francis	*SS*	*8*	*Kankakee*
Booth, Lyman	*Agr*	*31*	*Marshall*
Booth, Norman Ralph	*Agr*		*South Bend, Indiana*
Booze, Macdonald Charles	*Cer*	*102*	*Sullivan*
Borah, Loco Wilson	*LAS*		*Urbana*
Borg, Elmer Ambrose	*Agr*		*Stanton, Iowa*
Borget, Clara Marie Eliza	*LAS*	*96*	*Havana*
Born, Charles Edgar	*Agr*		*Cerro Gordo*
Born, Katherine Lois	*HSAgr*	*31*	*Champaign*
Born, Ray	*Bus*	*½*	*Champaign*
Borromeo, Canuto Octavio	*ME*	*125*	*Cebu, Cebu, P. I.*
Borton, Cecil Walden	*Bus*	*34*	*Urbana*
Borucki, Louis Francis Felix	*ME*		*Chicago*
Boston, Paul McConley	*Bus*	*30*	*Yorkville*
Bosworth, Walter Henry	*Bus*		*Elgin*
Botteron, George Washington	*SS*		*New Haven, Indiana*
Bourassa, Cornelius Paul	*LAS*		*Westfield, Massachusetts*
Bourassa, Reginald Pierre	*Agr*	*58*	*Westfield, Massachusetts*
Bovard, Millard Forrest	*LAS*		*Marseilles*
Bow, Loren Cushing	*CerE*	*106*	*Detroit, Michigan*
Bowen, John Almond	*Agr sp*	*18*	*Neponset*
Bower, Paul Eugene	*Agr*	*38*	*Champaign*
Bowersock, William Michael	*EE*		*Maroa*
Bowlus, Hazel W.	*LAS (SS)*	*102*	*Urbana*
Bowlus, Marie Louise	*SS*	*102*	*Urbana*
Bowman, Emily Maurine	*LAS (SS)*	*7*	*Pierceton*
Bowman, Leona Florence	*SS*	*11½*	*Decatur*
Bowman, Mabel	*LAS*	*27*	*Danville*
Boyd, Landon Baird	*AE*	*46*	*La Porte, Indiana*
Boyd, Marion Cummings	*LAS*	*33*	*Sheffield*
Boye, Walter Fred	*LAS*	*76*	*St. Peter*
Boyer, Bess, A.B., 1913	*LAS*		*Decatur, Indiana*
Boyle, Esther Hortense	*HSAgr*		*Hennepin*
Boynton, Jay Farnham	*Agr sp*		*Pleasant Plains*
Bradley, Carol	*HSAgr*	*69*	*Hume*
Bradley, Daniel Clair	*LAS*		*Champaign*
Bradley, Frank	*Agr sp*	*23*	*Prairie City*
Bradley, Harold Smith	*AE*	*117½*	*Rockford*
Bradley, John Thomas	*LAS*	*64*	*St. Louis, Missouri*
Bradley, LeRoy	*A*	*36*	*Ft. Wayne, Indiana*
Bradley, Loyd	*L*	*44*	*Mound City*
Bradley, Lucile	*LAS (SS)*	*55*	*Carbondale*
Bradley, Lura Jane	*HSAgr*		*Loda*
Bradley, Marie Lynn	*SS*	*8*	*Princeton*
Brady, George Keyports	*LAS*		*Brackettville, Texas*
Brady, William Thomas	*CerE*	*36*	*Anna*
Brain, Oliver Galbraith	*EE*		*Chicago*

Bramlet, Homer David	*SS*	*32*	*Eldorado*
Bramlet, Hubert Butler	*LAS*	*3½*	*Eldorado*
Branan, Harry Anthony	*MSE*	*37*	*Mattoon*
Branch, Leroy Parker	*Agr*		*Evanston*
Branch, Nelle Uree	*Lb*		*Champaign*
Branch, William Ralph	*Agr*	*33*	*Champaign*
Brandner, Emil George	*LAS*	*73*	*Chicago*
Brandon, Imogene	*SS*		*Springfield*
Brandon, Joseph Franklin	*Agr*	*66*	*Washington, Indiana*
Brandt, Richard Clarence	*CE*		*Evanston*
Brannon, George Raymond	*Agr*	*189*	*Lowell, Indiana*
Brashear, Roma, A.B. *(Missouri State Univ.)* 1907	*Lb*		*Eolia, Mississippi*
Bratten, Arno	*SS*	*21*	*Marion*
Braunsdorff, Reginald Kenneth	*EE*		*Mattoon*
Brazeau, Eugene Francis	*Bus*	*26½*	*New York City*
Brazelton, Calanthe Miriam	*LAS*		*Greensburg, Indiana*
Brede, Lothar Homer	*Ch*		*Collinsville*
Breece, Howard David	*LAS*		*Mt. Vernon, Indiana*
Breedis, John	*Ch (SS)*	*69*	*Champaign*
Breese, Carl Shipman	*EE sp*		*Manhattan, Kansas*
Breitstadt, Emma Matilda	*LAS*	*63*	*Quincy*
Breitstadt, Hulda Charlotte	*LAS*	*51*	*Quincy*
Breneman, Amos Lloyd	*Agr*	*60*	*Emporia, Kansas*
Brentlinger, Clell McArthur	*EE*	*7¼*	*Urbana*
Brew, George Joseph	*Agr*		*Chicago*
Brewer, Emerson Wilson	*Med*		*Rantoul*
Brewster, Harold Spencer	*Agr*		*Camp Point*
Briggs, Flora Bernice	*HSAgr (SS)*	*32*	*Champaign*
Briggs, Ray Herbert	*LAS*		*Clinton, Indiana*
Brigham, Erwin Risley	*ME*		*Glencoe*
Bright, Leslie Orville	*LAS*	*95*	*Foosland*
Brightfield, Myron Franklin	*SS*	*6*	*Belleville*
Brinkerhoff, George Norman	*LAS*		*Springfield*
Brinkerhoff, Verne William	*ME*	*86*	*Rock Island*
Brinton, Helen	*Agr*		*Dixon*
Briscoe, Lucile Sarah	*SS*	*5*	*Westfield*
Brisendine, Ray George	*Agr*		*Pekin*
Bristow, George Washington	*LAS*	*63*	*Metropolis*
Britt, Charles Allen	*Agr*	*33*	*Penfield*
Britt, Raymond Lewis	*LAS*	*25*	*Freeport*
Britt, Thomas Madison	*Agr*		*Wheeler, Texas*
Brittin, William Allan, Jr.	*Agr*	*28*	*Virden*
Britton, Floyd Evanston	*L*	*60*	*Farina*
Brobeck, Von Haller	*Med*	*56*	*Hoopeston*
Brock, William Sanford	*Agr*	*114½*	*Waynesburg, Pennsylvania*
Brockmeier, Angelina Louise	*HSLAS*	*29*	*Freeport*
Brodd, Lawrence Samuel	*CE*	*96*	*Cambridge*
Brodsky, Joseph Baar	*AE*		*Chicago*
Bromberg, Nathan	*CerE*	*106½*	*Chicago*
Bromm, Alvin Carl	*A*		*Evansville, Indiana*
Bronson, Roger Beckwith	*Bus*	*68*	*Chicago*
Brook, Frederick Vail	*Agr*		*Ardmore, Pennsylvania*
Brooks, Charles Campbell	*Agr*		*St. Louis, Missouri*
Brooks, Ethel Isabel	*HSLAS*	*65*	*Beecher City*
Brooks, Eula Margaret	*LAS*		*Chrisman*
Brooks, Fannie Maria	*LAS*	*115*	*Saunemin*
Brooks, Frances	*LAS*		*Urbana*
Brooks, Frederick Augustus	*EE*	*38½*	*Urbana*
Brooks, Oscar Franklin	*Agr*	*93½*	*Chrisman*
Brooks, Raymond Harrison	*Agr*	*69*	*Marion*
Brooks, Roger	*EE*	*2*	*Urbana*
Brooks, Viola	*LAS*	*31*	*Chrisman*
Brotherton, William Edgar	*ME (SS)*	*31*	*Guthrie*
Brown, Albert Paul	*A*	*15*	*Tunbridge Wells, England*
Brown, Albert Willard	*LAS*	*73*	*Tiffin, Ohio*
Brown, Allen Brookins	*LAS*	*30*	*Muskogee, Oklahoma*
Brown, Anna	*Mus sp*	*6*	*Urbana*
Brown, Bayard	*Agr*	*69*	*Genoa*
Brown, Carter Pennell	*Agr*	*2¼*	*Normal*
Brown, Clair William	*Agr*	*55½*	*Greensburg, Indiana*
Brown, Dorothy Sargent	*HSLAS*	*31*	*Geneseo*
Brown, Elmer Alfred	*EE*	*115*	*St. Louis, Missouri*
Brown, Elmer Arthur	*ME*	*11¼*	*Urbana*
Brown, Frank Spangler	*Agr*	*7*	*Elwood*
Brown, Harlow W	*Agr*		*Modesto*
Brown, Helen Dorsey	*Agr (SS)*	*93*	*Chicago*
Brown, James Fearon, A.B., 1913	*L*	*31*	*Urbana*
Brown, John Bernis	*Ch*	*102*	*Rock Falls*
Brown, John Lawrence	*Bus*	*3½*	*Tiskilwa*
Brown, John Lyman	*ChE*	*31*	*Anderson, Indiana*
Brown, Kenneth George	*Bus*	*66½*	*Urbana*
Brown, Lewis Hallet	*LAS*		*Delavan*
Brown, Lisbeth	*HSAgr*		*Batavia*

Brown, Lloyd Warfield	*Agr*	*102*	*Jacksonville*
Brown, Pembroke Holcomb	*LAS*	*100*	*Rockford*
Brown, Ralph Powers	*CE*	*73*	*Chicago*
Brown, Robert Rea	*Bus*	*70*	*Urbana*
Brown, Roger Q	*SS*	*8*	*Hardin, Missouri*
Brown, Tom	*AE*	*37*	*Chicago*
Brown, Waldo Reinhart	*LAS*	*109*	*Niles Center*
Browne, William Harcourt	*Med*		*Chicago*
Brownfield, Georgia	*HSAgr*	*31*	*Urbana*
Brownfield, Lelah, A.B., 1910	*Bus*		*Urbana*
Browning, Thomas Samuel	*Cer(SS)*	*40*	*Benton*
Bruington, Earl Vivian	*Agr*	*68*	*Monmouth*
Bruner, Crane Simpson	*CE*	*108½*	*Urbana*
Bruns, Herman Edward	*Agr*		*Chicago*
Brunskill, Everett Robert	*ChE*	*101*	*Pontiac*
Brunskill, Eyelar William	*Agr*	*33*	*Pontiac*
Brunson, Hazel Evelyn	*Bus*	*32*	*Chicago*
Byra, Edward Gunning	*Agr*	*17*	*Tolono*
Brya, Frank Gunning	*Agr sp*		*Champaign*
Bryant, Louis Ralph	*Agr*		*Princeton*
Bryant, Robert Alfred	*LAS*		*La Grange*
Buchanan, Kenneth	*A*	*35*	*Hillsboro, Ohio*
Buchanan, Richard Bell	*Agr*		*Oklahoma City, Okla*
Buchanan, Roy Irving	*Agr (SS)*	*151*	*St. Francisville*
Buchanan, Victor Clarence	*Agr*		*Lawrenceville*
Buchen, Helen Louise	*LAS*	*29*	*Montello, Wisconsin*
Bucher, Ermane Gaylord	*Cer*	*103*	*Pontiac*
Buck, Harold Philbrich	*A*		*Chicago*
Buckler, Carl William	*LAS(SS)*	*104*	*Metcalf*
Buckler, Helen Irene	*Mus (SS)*		*Champaign*
Buckler, Joseph Bruce	*SS*	*17*	*Metcalf*
Buckner, Orello Simmons	*Cer*	*70*	*Newark, New York*
Buell, Charles Clinton	*LAS (SS)*	*22*	*Highland Park*
Buell, Temple Hoyne	*A (SS)*	*77*	*Highland Park*
Buenger, Katherine Margaret	*HSLAS (SS)*	*93*	*Granite City*
Buerkin, Julius Allan	*AE*	*73*	*Quincy*
Buhai, Abraham Samuel	*CerE (SS)*	*73*	*Chicago*
Bull, Maude Emily	*HSAgr*	*99*	*Union Grove*
Bull, Willard Edwin	*EE*		*Elgin*
Bumann, Albert Theodore	*ChE*		*Litchfield*
Bumgarner, Ruth Subina	*LAS*	*65*	*McNabb*
Bunting, Loyd Daniel	*LAS*	*66*	*Ellery*
Burch, Margaret Bruce	*HSLAS*		*Lockport*
Burd, Robert Holdren	*Agr*		*St. Louis, Missouri*
Burgan, Laverne	*HSLAS*	*61*	*Ridgefarm*
Burger, Albert Harold	*Agr*	*34*	*Elgin*
Burgess, Carrie Vesta	*LAS*	*53*	*Dundee*
Burgess, Malcolm Herbert	*Agr*		*Canton*
Burgess, Oscar William	*LAS*		*Fairfield*
Burgett, Charles Culbertson	*Bus*		*Newman*
Burgoon, David Warner	*EE*	*74*	*East St. Louis*
Burgston, Clyde Harold	*Agr*	*30½*	*Moline*
Burke, William Fogarty	*Agr*		*Lincoln*
Burkhart, Paul Henry	*EE*	*75*	*Henry*
Burns, Clifford Clare	*Agr*	*59*	*East Dubuque*
Burns, Owen McIntosh	*LAS*	*64*	*Danville*
Burnside, Karl Ackerman	*AE*	*5*	*Orleans, Iowa*
Burrell, Beulah	*LAS*	*29*	*Effingham*
Burrell, Thomas Henry	*AE*	*76*	*Albion*
Burroughs, Wilbur Gordon	*SS*	*141*	*Edwardsville*
Burt, Lauren Dayton	*Bus*	*13*	*Savoy*
Burtnett, Reid Albert	*EE*	*71½*	*St. Louis, Missouri*
Burton, Nina Pearl	*HSLAS*		*Chicago*
Burton, Robert Alson, Jr.	*LAS (SS)*	*26½*	*Chicago*
Burwash, Grace Sarah	*LAS*		*Champaign*
Burwash, Lois Irene, A.M., 1907	*SS*		*Champaign*
Burwash, Louis Stephen	*Agr*	*33*	*Champaign*
Burwash, Mary Gladys, A.B., 1913	*Lb*		*Champaign*
Burwash, Ralph Samuel	*ME*	*69½*	*Champaign*
Busby, Beulah	*Mus*		*Sparland*
Bush, Alexander	*Ch*		*Glencoe*
Bush, Frank Avery	*Bus*	*95*	*Peoria*
Bush, Kenneth Burman	*CE*	*87*	*Quincy*
Bushnell, Ruth Charlotte	*SS*		*Waukegan*
Butler, Allen Gilman	*EE*		*Peoria*
Butler, Charles Henry	*LAS*	*37*	*Sullivan*
Butler, George Howland	*CE*	*106*	*Chicago*
Butler, Mary	*HSAgr*	*48*	*Cairo*
Butler, Philip Marble	Agr		*St. Louis, Missouri*
Butler, Walter Carter	*Agr*		*Chicago*
Butterfield, Francis Eugene	*EE*	*87*	*Wilmington*
Butzer, Byrdie Blye	*HSLAS*	*100*	*Hillsdale*
Butzer, Goldia Grace	*LAS*	*100*	*Hillsdale*

Butzer, Verna Viola	*HSLAS*	*107*	*Hillsdale*
Butzow, Bertha Henrietta	*SS*	*8*	*Watseka*
Buzzard, Guy Ashton	*SS*	*8*	*Bloomington*
Bye, Herbert William	*L*	*61*	*Chicago*
Byers, Hale Nicoles	*LAS*	*28*	*Garrett, Indiana*
Byrne, Rose Helen	*LAS*		*Chicago*
Cadisch, Gordon Francis	*Agr*	*33*	*Cleveland, Ohio*
Cadle, Chester Junius	*Bus*	*54*	*Charleston*
Cadle, Hubert Atwater	*ME*	*66*	*Westfield, Massachusetts*
Cady, Lawrence Charles	*ME*		*Kewanee*
Caldwell, Lloyd Raymond	*Agr*	*105*	*Neoga*
Caldwell, Ruth Marie	*LAS*	*34*	*Milford*
Caldwell, Walter Randolph	*LAS*		*Fairfield*
Calhoun, Preston Browne	*Agr*	*29*	*Glencoe*
Calkin, Charlie James	*ME*		*Crescent City*
Cameron, Charles Conrad, Jr.	*Bus*		*Wilmette*
Cameron, Sarah Hester	*SS*	*3*	*Lincoln*
Campbell, Arabel Beryl	*SS*	*63*	*Valparaiso, Indiana*
Campbell, Charles Warren	*MnE*	*36*	*Coal City*
Campbell, Chester Morgan	*Ch*		*Elgin*
Campbell, David Joseph	*Agr*	*85*	*Urbana*
Campbell, Duncan McEvoy	*CE*	*60½*	*Chicago*
Campbell, Ethelred Erasmus	*ChE sp(SS)*	*8*	*St. Elizabeth, Jamaica*
Campbell, Florence Maud	*LAS*	*65*	*Tolono*
Campbell, Florence Merlee	*HSLAS*	*39*	*Carmi*
Campbell, Francis Marion	*Agr*		*Ursa*
Campbell, Jack D	*Med*		*Edwardsville*
Campbell, Marshall	*Bus*		*Chicago*
Campbell, Marvine Margaret	*LAS*		*Doniphan, Missouri*
Campbell, Mason Herbert	*Agr*	*33½*	*Elgin*
Campbell, William Franklin	*Agr*	*32*	*Urbana*
Canaday, Lora Alice	*LAS (SS)*	*96*	*Winchester, Indiana*
Canaday, Miles Edwards	*Agr*	*24*	*Chicago*
Canine, Ione	*SS*	*6½*	*Sheldon*
Cannon, Tyrone Murphy	*ME*	*35½*	*Rapatee*
Canter, Mrs. Edna Maloy	*LAS*		*Champaign*
Capniegro, Sebastian	*EE*	*6*	*Chicago*
Carbaugh, Philip Ward	*LAS*		*Rockford*
Cargill, Frederick Chauncy	*Agr*	*29*	*Mason City*
Carley, Paul Sterling	*Med*	*24½*	*Champaign*
Carlsen, Arnold Wilmore	*AE (SS)*	*111*	*Chicago*
Carlson, Ansgar Lilius	*Agr*	*32*	*Batavia*
Carlson, Carrie Esther	*LAS*	*67*	*Chicago*
Carlson, Harry Leonard	*Agr*	*34*	*La Salle*
Carlson, Lee Russel	*Bus (SS)*	*73*	*Champaign*
Carman, Florence	*HSLAS*		*Claytonville*
Carney, Mary Vance	*SS*	*137*	*Marseilles*
Carney, Oscar Lyon	*CE*		*Marseilles*
Carpenter, Charles Kneeland	*A*	*106*	*Faribault, Minnesota*
Carpenter, Thomas Earle	*Bus*	*50*	*Keokuk, Iowa*
Carr, Kenneth Wright	*AE*		*Oak Park*
Carr, Vernon Wesley	*Bus*	*36*	*Denison, Iowa*
Carrier, Earle Wesley	*CE*		*Chicago*
Carrithers, Glenn Wilson	*Agr*	*30*	*Toluca*
Carrithers, Henry Havens	*Agr*		*Hudson*
Carroll, Daniel Bernard	*LAS (SS)*	*80*	*Pittsfield*
Carroll, Franklin Otis	*REE*	*71*	*Jerseyville*
Carroll, James Bernard	*A (SS) sp*	*32*	*Bradford*
Carson, Natalia Margaretta	*LAS*	*29*	*Chicago*
Carter, Alice	*HSLAS*	*100*	*Evanston*
Carter, Floyd	*Agr*		*Clinton*
Carter, John Calvin	*SS*	*7*	*Cobden*
Carter, Lucile	*HSAgr*	*128*	*Plainfield, Indiana*
Carter, Walter McKinley	*Bus*	*32*	*Fort Wayne, Indiana*
Carter, William Stokely	*Med*	*29*	*Trenton*
Cary, Clarence Edward	*Agr*		*Elgin*
Cary, Malcolm Combs	*ME*		*Oak Park*
Casey, Dawn Reber	*HSLAS*		*St. Louis, Mo.*
Casey, Isabel	*SS*	*21*	*Pana*
Casner, Sidney, A.B., 1914	*L*	*30*	*Calgary, Canada*
Casserly, Joseph Bernard	*Agr*	*93½*	*Champaign*
Castle, Richard Lloyd	*Bus (SS)*	*21*	*Urbana*
Castle, Russell D V	*Bus (SS)*	*56½*	*Urbana*
Castleberry, Georgia	*HSAgr*		*McCune, Kansas*
Castro, Julio Melchor	*Agr*	*45½*	*Cardenas, Cuba*
Cattell, Fred Ray	*Bus*	*28*	*Salem*
Cauble, Charles Allan	*Bus*		*Champaign*
Cavette, Francis Erle	*Bus*	*31*	*Lacon*
Cecil, Lawrence Keith	*Bus*		*Champaign*
Cessna, Robert	*Agr*		*Danville*
Chabot, Kathleen Martin	*HSLAS*	*31*	*Kankakee*
Chaiken, Edith	*LAS*	*36*	*Chicago*
Chalcraft, Delos Maurice	*Agr*		*Albion*

Chalcraft, Lloyd Walton	*Agr (SS)*	*41*	*Albion*
Chamberlain, Richard Harris	*Bus*	*2*	*Peru, Indiana*
Chambers, Roy Ellsworth	*ChE*		*Chenoa*
Chambers, William Harold	*Agr*	*102*	*Evanston*
Champlin, Ellis Howard	*SS*	*8*	*Friendship, New York*
Champlin, Grace Elizabeth	*HSAgr*	*6¼*	*Chicago*
Chan, Tingit Harry	*Agr*	*114½*	*San Francisco, California*
Chan, Yu Chang	*Ch*		*Kirin, China*
Chan, Ye Young	*LAS*		*Shin Ning, China*
Chancellor, Catherine	*LAS*		*Stockland*
Chand, Hari	*EE*	*109*	*Partanwali, India*
Chandler, Edward Charles	*LAS*		*Flora*
Chandler, Leslie George	*Ch*		*Hinsdale*
Chang, Tien Tsai	*Agr*	*71*	*Canton, China*
Chang, Tze-Li	*RCE (SS)*	*39*	*Changsha, China*
Chapman, Edward Neal	*ChE*	*99*	*Chicago*
Chapman, Ralph Dwyer Clinton	*Bus*	*103*	*Vienna*
Chartrand, John Baptist	*EE (SS)*	*107*	*East St. Louis*
Chase, John Albion	*CerE (SS)*	*63½*	*Urbana*
Chatten, Carney Edward	*SS*	*105*	*Flora*
Chatterton, John Lanphier	*LAS*	*41*	*Springfield*
Checkley, Joseph Harvey, B.S., 1913	*LAS*	*136*	*Urbana*
Chen, Jung-ting	*Agr*	*77*	*Washington, D. C.*
Chen, Lang Suing	*Bus (SS)*	*81½*	*Peking, China*
Chen, Queh King	*LAS*	*33*	*Sonzee City, China*
Cheney, Mrs. Martha Dorsey	*Agr sp*		*Louisville, Kentucky*
Cheng, Yun Tin	*Bus*	*37*	*Hong Kong, China*
Cherry, Oscar Allen	*Ch*		*Pawnee*
Chesley, Alice Crawford	*LAS*		*Urbana*
Cheung, Sui Kaan	*Ch*		*Canton, China*
Chew, Dorothy	*HSLAS*	*88*	*Pueblo, Colorado*
Childs, James Bennett	*LAS*		*Shohonier*
Chiles, Howard Marion	*ChE*	*53½*	*Carlinville*
Chittenden, Robert Mearle	*CerE*	*36*	*Brookfield, Missouri*
Choisser, Ferne	*LAS*		*Benton*
Choy, Bung Chen	*CE*		*Honolulu, Hawaii*
Christ, George Phillip	*ChE*		*Quincy*
Christen, Lester Howard	*AE*	*37*	*Elgin*
Christie, James	*Med*	*7*	*Rantoul*
Christopher, Arthur Bailey	*Cer (SS)*	*38*	*Canton*
Christy, Glen	*Mus (SS)*	*125*	*Harrisburg*
Christy, Grace	*HSAgr*		*Urbana*
Chubbuck, Judson Elson	*EE*	*56*	*Gibson City*
Church, Leroy	*EE*	*32*	*West Chicago*
Churchill, Fred Weaver	*Agr*		*Fairbury*
Churton, Florence Helen	*HSAgr*	*53*	*Clinton, New York*
Chvatal, Ray James	*Cer*	*30*	*Chicago*
Cierpik, Casimir Stanley	*EE*		*Chicago*
Cieslik, Edmund	*CE*	*77*	*Chicago*
Cinnamon, Floyd Franklin	*EE*		*Crete*
Citizen, Carl Christopher	*LAS*	*32*	*Danville*
Civretto, Alfred John	*EE*		*Lead, South Dakota*
Claar, Elmer Allen	*LAS*	*101*	*East Moline*
Clamitz, Arthur Isadore	*LAS*	*17½*	*Chicago*
Clapp, Harland Taylor	*Agr*		*Mentor, Ohio*
Clarahan, Charles Henry	*CE*		*Oak Park*
Clarida, Troy Wayne	*Agr*	*33*	*Marion*
Clark, Albert LeRoy	*Agr*		*Chicago*
Clark, Bayard Hand	*Agr*	*91½*	*De Kalb*
Clark, Charles M	*RME*	*37*	*West Chicago*
Clark, George	*Agr*	*6¼*	*Carthage*
Clark, Harold Ames	*Agr (SS)*	*31*	*Baltimore, Maryland*
Clark, Harold Edward	*Cer*	*68*	*Sterling*
Clark, James Glen	*Bus*		*Moweaqua*
Clark, James Holbert	*LAS*	*10*	*Mattoon*
Clark, James Russell	*A*	*80*	*Urbana*
Clark, John Gunn	*A*	*16*	*Memphis, Tennessee*
Clark, John M	*SS*	*3*	*Urbana*
Clark, Margaret	*Agr*		*Peoria*
Clark, Marshall Grant	*Agr*		*Carthage*
Clark, Reid William	*Agr*		*Attica, Indiana*
Clark, Van Ness	*Bus*		*Dansville, New York*
Clark, George Edward	*EE*	*35*	*Noblesville, Indiana*
Clarke, Helen Beaulah	*LAS (SS)*	*116½*	*Urbana*
Clarkson, Albert Jay	*EE*	*108*	*Champaign*
Clausen, Andrew	*Bus*		*Chicago*
Clausen, Clara Alice	*LAS*	*6¼*	*Secor*
Clayberg, Dorothea Marion	*A*	*69*	*Oak Park*
Clayton, Harry Leslie	*Agr*	*35½*	*Kempton*
Clegg, Carl	*ME*		*Chandlerville*
Clem, Leona	*LAS*		*Casey*
Clem, Orlie Martin	*LAS*		*Benton*

Clements, Esther	*HSAgr (SS)*	*24*	*Champaign*
Clements, Olen Robert, A.B., 1914	*L*	*22*	*West Union*
Cleve, Albert	*CE*	*20*	*Chicago*
Cleveland, Ralph Charles	*Agr*	*26½*	*Rochelle*
Cleveland, Warren Eddy	*ME*		*Rockford*
Cline, Gerald Morris	*Med*		*Le Roy*
Cline, Irl Reuben	*CE*	*108*	*Medora*
Cline, Myra Dianna	*SS*		*Waverly*
Clinebell, Howard John	*Agr sp*		*Glasford*
Close, Arthur Buckley	*Agr*		*Chicago*
Clover, Ira Newton	*MSE (SS)*	*115½*	*Gardner*
Cloyd, Louis Samuel	*Bus*		*St. Louis, Missouri*
Clyman, David	*AE*	*107*	*Chicago*
Cobb, Ernest Williams	*ME*	*70*	*Chicago*
Cobley, Howard William	*Agr*	*24*	*Chicago*
Coburn, Mildred Leann	*LAS (SS)*	*101½*	*McLean*
Cochran, Charles Blake	*LAS*	*97½*	*Marion*
Cochran, Russell William	*LAS*	*26*	*Champaign*
Cochrane, Elvis Elroy	*SS*	*6½*	*Herman, California*
Cogdall, Harry Frank	*Agr*	*102*	*Chicago*
Cohen, Carl	*Med*		*Atlanta*
Cohen, Isadore Maurice	*AE*	*29*	*Chicago*
Cohen, Julius	*LAS*	*30*	*St. Louis, Missouri*
Cohn, Louis Allen	*Agr*		*Chicago*
Coile, Sam Henry	*A*	*37*	*Knoxville, Tennessee*
Colbert, Harold Leland	*SS*	*21½*	*Washington, Indiana*
Colbert, James Rubin, A.B., 1914	*L*	*23*	*Fairfield*
Colby, Paul Whiting	*A*		*Sioux City, Iowa*
Colcord, Frank Maynard	*Agr*	*120*	*Greenville*
Coleman, Henry Clay, Jr.	*ME*	*64*	*Greenville*
Coleman, Oren	*SS*	*33½*	*Carterville*
Coleman, Paul Wayne	*Agr*	*95*	*Ipava*
Coley, Glenn	*ChE*	*68*	*Pittsfield*
Collier, Ethel Alice	*LAS*	*29*	*Union Grove, Wisconsin*
Collins, Campbell Stephen	*Agr*		*Peoria*
Collins, Helen Beatrice	*HSLAS*	*10*	*Gilmon*
Collins, Irvin Bliss	*SS*	*8*	*Potomac*
Collins, Lester Edwards	*Agr*		*Greenfield*
Collins, Lucile Milham	*HSAgr*		*Vicksburg, Michigan*
Collom, Mary Elizabeth	*HSLAS*	*103*	*Pittsburgh, Pennsylvania*
Colman, Ruth Phoebie	*SS*	*7½*	*West Chicago*
Colnon, Aaron James	*CE*	*3*	*Ridgway*
Colnon, John Thomas	*CE*		*Ridgway*
Colson, Etta M.	*SS*		*Urbana*
Colson, Harold Edward	*Agr*	*105½*	*St. Charles*
Colson, Robert J.	*LAS*		*St. Charles*
Colton, Edwin Thome	*MSE*	*34*	*Kansas City, Missouri*
Colton, Russell Smith	*MSE*	*75*	*Kansas City, Missouri*
Comer, Helen Louise	*SS*	*7*	*Charleston*
Compton, Donald Elliott	*A*		*Tomah, Wisconsin*
Comstock, Daniel Franklin	*Bus*	*106*	*Evanston*
Comstock, Ralph Wrigley	*Bus*	*36*	*Monmouth*
Conant, Lewis Jasper	*Bus*		*Kinmundy*
Conat, Mabel Louise, A.B. *(Univ. of Michigan)* 1909	*Lb*	*58*	*Detroit, Michigan*
Condit, Irene Viola	*SS*	*24*	*Champaign*
Conger, Almon Mortimor	*ME*		*Elgin*
Congleton, Frank Harold	*Agr*		*Urbana*
Confrey, Joseph Burton	*SS*	*7*	*La Salle*
Conklin, Bristol	*Med*	*33*	*Earlville*
Conklin, Helen Naomi	*HSLAS*		*Roscoe*
Conklin, Paul Stanley	*ME*	*75*	*Roscoe*
Conley, David Oris	*Med*	*66*	*Streator*
Conley, Ellen Gertrude	*SS*		*Arcola*
Connell, David Evans	*CE*		*Chicago*
Connor, John Hal	*LAS*		*Newton*
Conover, James Theodore	*EE*		*Bradford*
Conrad, Orien Ray	*SS*	*31½*	*Vandalia*
Consoer, George Otto	*CE*	*43*	*Oak Park*
Cook, Mrs. Emola Miller	*SS*		*Penfield*
Cook, Eugene	*CE*	*54*	*Odin*
Cook, Harriet Irene	*LAS*	*32*	*Des Plaines*
Cook, John Manchester	*LAS*		*Chicago*
Cook, Thomas Lee, A.B., 1905	*SS*		*Mt. Pulaski*
Coolcy, Roy Claiborne	*Agr*	*33*	*Clinton*
Coolidge, Richard Newell	*CE*	*75*	*Lead, South Dakota*
Coolidge, Robert Blake	*Agr*		*East Cleveland, Ohio*
Coolidge, William Francis	*Agr*		*Bloomington*
Cooling, Kenneth George	*Bus*		*Rockford*
Coolley, Elmer Burt	*Agr*	*12½*	*Danville*
Cools, Gabriel Victor	*LAS*		*Arcon, Panama*
Cooper, Charles Edward	*Agr*	*66*	*Carlisle, Indiana*
Cooper, David William	*EE*	*70*	*Astoria*

Cooper, Edward Alden	*LAS(SS)*	*99*	*La Grange*
Cooper, Henry Noble, Jr.	*Agr*	*5*	*Chicago*
Cooper, Kenneth Lupton	*CE*	*102½*	*Chicago*
Cope, Lorin Vaughan	*Agr*	*28*	*Tonti*
Copenhaver, Robert George	*Agr*	*32*	*Polo*
Copley, Beatrice Virginia	*LAS*	*106*	*Joliet*
Copper, Robert Elmer	*Agr*	*31½*	*San Jose*
Corbin, Ruth Ione	*LAS*		*Sullivan*
Corbley, Lynn	*L*	*61*	*Paxton*
Cordell, Eula Ethelyn	*LAS*	*88*	*Macomb*
Cordell, Ralph Vail	*SS*	*14*	*Galesburg*
Cordell, Vail	*SS*	*120½*	*Macomb*
Corke, Harold Winfred	*Bus*	*35*	*Evanston*
Corley, Seymour	*CE*	*108*	*Decatur*
Cornell, Donald Sidney	*ME*	*36*	*Western Springs*
Corper, Philip	*Bus*		*Chicago*
Corrie, Lester Linn	*Agr*		*St. Francisville*
Corrie, Wendell Bliss	*Agr*		*St. Francisville*
Corzine, Bruce Herbert	*LAS*	*68*	*Charleston*
Corzine, Clorah Eileen	*SS*	*8½*	*Jonesboro*
Corzine, Dale Clair	*Agr*	*31*	*Assumption*
Cossart, Estella Anna	*SS*		*Chicago Heights*
Cost, James Nicks	*ME*		*River Forest*
Cotta, Homer Willis	*Agr*		*Rockford*
Cotta, Ralph Leslie	*Agr*		*Rockford*
Cottingham, Nora	*LAS*	*108½*	*Fairbury*
Cottingham, Paul	*EE*		*Danville*
Coultas, Charles Rufus	*Agr (SS)*	*42*	*Virden*
Coultas, Wilson James	*Agr sp*		*Winchester*
Coulter, Isaac Harry	*Agr*		*Alton*
Countryman, Irving Byron	*Bus*	*32*	*Dixon*
Courtney, George Frederick	*LAS*		*Urbana*
Couto. Licinio da Silva	*EE*	*32*	*Rio de Janeiro, Brazil*
Covey, John Ellsworth	*Agr*	*66½*	*Bloomington*
Cowell, Roland Adlemar	*Bus*		*Lawrence, Kansas*
Cowgill, Clinton Harriman	*A*	*86*	*Topeka, Kansas*
Cox, Clare Francis	*SS*	*8*	*Vandalia*
Cox, Henry Ray	*Agr*	*33*	*St. Louis, Missouri*
Coyle, Cassius Marcellus	*Bus*	*64*	*Gridley*
Craft, John Countryman	*Agr*	*5*	*Rochelle*
Craig, Hazel Iona	*Mus*		*Champaign*
Craig, Helen Elizabeth	*LAS*		*Hindsboro*
Craigmile, Jeannette Elizabeth	*LAS sp*		*La Grange*
Craigmile, Mary Agnes	*LAS (SS)*	*41½*	*Rantoul*
Craigmile, Mary Delight	*LAS*	*5*	*La Grange*
Craigmile, Robert James	*EE*	*38*	*Knox, Indiana*
Crain, Chester McElfresh	*Bus (SS)*	*124*	*Urbana*
Crane, Dudley Winthrope	*Agr*	*66*	*Montclair, New Jersey*
Cravens, Thomas Carl	*Agr*	*61*	*Bloomfield, Indiana*
Crawford, Chalmers Woodruff	*Agr*	*106*	*Pontiac*
Crawford, Helen Lucile	*LAS*	*98*	*Urbana*
Crawford, James Louis	*CerE*	*29*	*Macomb*
Crawford, Louis Noiré	*A*	*57*	*West Lafayette, Indiana*
Crawford, Ruth Marguerite	*HSLAS*	*31*	*Urbana*
Crawford, William Kinney	*Agr*	*14*	*Pinckneyville*
Crawford, Woodruff Lynden	*Med*	*27*	*Pontiac*
Crebs, John Powell	*Agr (SS)*	*70*	*Carmi*
Creighton, David Edward	*Agr*		*Phoenix, Arizona*
Creighton, Edward Woodin	*Agr (SS)*	*105½*	*Fairfield*
Creighton, Mary Elizabeth	*LAS*	*49½*	*Phoenix, Arizona*
Cress, Eldred Everett	*AE*		*Carlinville*
Cressey, Lucretia	*LAS*	*97*	*Mattoon*
Crickenberger, Lawrence Henkel	*Agr sp*		*New Market, Virginia*
Criley, Harlan Russell	*AE*		*Champaign*
Crismore, Joseph Collins	*ME*		*Berwyn*
Criss, Edward	*Agr (SS)*	*108*	*Pittsfield*
Croak, John Elmer	*LAS(SS)*	*15½*	*Decatur*
Crofts, Carson	*Bus*	*31*	*La Grange*
Croll, Hilda Marion	*HSLAS*	*66*	*Beardstown*
Crombie, Robert John	*LAS*	*24*	*Peoria*
Crosby, Henry Fay	*Agr*		*Detroit, Michigan*
Crosiar, Arthur Ogan	*Agr*		*Utica*
Cross, George Arthur	*Agr*	*63*	*Polo*
Cross, Mary Ann	*LAS*		*Roachdale, Indiana*
Crowley, Lloyd Isaac	*CE*		*Newton*
Cruchaga, Enrique Felix	*MnE*		*Santiago, Chile*
Crutcher, Ann Francis	*HSLAS*		*Springfield, Missouri*
Crutcher, Walter Louis	*EE(SS)*	*95½*	*Springfield, Missouri*
Crutchfield, William	*A (SS)*	*100*	*Chattanooga, Tennessee*
Cryder, John Henry	*Agr*	*34*	*Plainfield*
Cryder, Mary Edna	*LAS*	*32*	*Plainfield*
Cullinane, George Madill	*Bus*	*38*	*St. Louis, Missouri*
Culmer, Bruce Nutter	*EE (SS)*	*61½*	*Martinsville, Indiana*

Culp, John Dewitt	*CE*	*88*	*La Grange, Indiana*
Culter, Mrs. Lucy Jane	*SS*		*Urbana*
Cumfer, Donald Alonzo	*ME*		*Chicago*
Cummings, Harold Lane	*Bus*	*97*	*Clinton*
Cummins, Wesley Erett	*L*	*59*	*Carbondale*
Cunat, Miles Joseph	*Agr*		*Chicago*
Cunningham, Opal Claree	*LAS*	*28*	*Urbana*
Cunningham, Sterling Ross	*L*		*Bismarck*
Curl, Charley Edmund	*ME*	*75*	*Paris*
Currie, Nannie	*LAS (SS)*	*73*	*Loda*
Currier, Donald Eugene	*Agr*	*91*	*Aurora*
Curry, James Henry	*AE(SS)*	*109*	*Marissa*
Curtis, Burton Tuttle	*Agr (SS)*	*57½*	*Decatur*
Curtis, Hazel Birdelle	*HSAgr*	*16*	*Woodland*
Curtis, Miriam Austin	*HSLAS*		*St. Louis, Missouri*
Curtis, Smith	*EE*		*Albion*
Curtis, William	*Med*		*Chicago*
Curtiss, George	*Agr*	*70*	*Stockton*
Curtiss, Ralph Edwin	*Agr*	*25*	*Marengo*
Cuskaden, Major	*Agr*		*Arcola*
Cuthbert, Dorothy Lucile	*LAS*	*99*	*Gilsum, New Hampshire*
Cuthbertson, George Sinclair	*Bus*		*Oak Park*
Cylkowski, Vincent Dominic	*CE (SS)*	*104*	*Chicago*
da Costa, Manuel Ferreira	*EE*	*73*	*Cortiba, Brazil*
Dadant, Harriette Gabriel	*HSLAS*	*33*	*Hamilton*
Dahlberg, Truman	*ChE*		*Chicago*
Dahlin, Edna	*HSAgr*		*Geneva*
Dailey, Arthur Aloysius	*ME*	*8*	*New York City*
Dale, Fred Stinson	*Agr*		*Mt. Vernon*
Dale, John Herman	*Agr*	*31½*	*Mt. Vernon*
Dallach, Gertrude Blanche	*SS*		*Galesburg*
Dallenbach, Maybell May	*HSAgr*	*32*	*Champaign*
Daly, Ewing Porter	*ME*	*37*	*Ottawa*
Daly, Geraldine	*LAS*	*8*	*Joliet*
Daly, Helen	*LAS*	*39*	*Monmouth*
Dammers, John William	*LAS (SS)*	*88*	*Chicago*
Dappert, Anselmo	*CE*		*Taylorville*
Darby, Harry, Jr.	*ME*	*33½*	*Kansas City, Kansas*
Darmstatter, Helen Olive	*HSAgr*		*New Athens*
Darrell, George Charles	*AE*	*37*	*Chicago*
Darsett, Mary Elva	*HSAgr*		*Augusta*
Dauberman, Margarete Lucile	*LAS (SS)*	*95*	*Mansfield*
Daugherty, Anna Elizabeth	*LAS*	*117*	*Urbana*
Daugherty, Robert Hughes	*Agr*		*Peoria*
Davidson, Blaine Thomas	*L sp*	*9*	*Urbana*
Davidson, Gaylord Stillman	*Bus*		*Springfield*
Davidson, Lola Margaret	*HSLAS*	*40½*	*Crowfordsville, Indiana*
Davidson, Mary Catherine	*HSLAS*		*Crowfordsville, Indiana*
Davidson, Scott McKinley	*Med*		*Solem*
Davis, Mrs. Adelia	*Agr sp*		*Galesburg*
Davis, Clara Elizabeth	*Mus*	*69*	*Urbana*
Davis, Clare Rudolph	*LAS sp*		*Donnellson*
Davis, Earl Thomas	*Agr*	*37*	*Chicago*
Davis, Elmer Leon	*Bus sp*		*Kankakee*
Davis, Eugene John	*Bus*	*17½*	*Chicago*
Davis, Frederick Abram	*Agr*	*33*	*Cherry Valley*
Davis, George Robert	*EE*	*28*	*Mt. Sterling*
Davis, Gertrude Curtis, A.B., 1910	*HSLAS*		*Holton, Kansas*
Davis, Helen	*LAS*		*Los Angeles, California*
Davis, Helen Powers	*HSLAS*	*101*	*Holton, Kansas*
Davis, Harry Roscoe	*AE*	*50½*	*Anna*
Davis, Leonard Hoadley	*Agr*	*30½*	*Huron, South Dakota*
Davis, Leonard Louis	*CE*	*43*	*Freeport*
Davis, Martha Laurafred	*LAS*		*Carbondale*
Davis, Melvin Earl	*AE*	*3*	*Chicago*
Davis, Milton Russell	*Agr*	*32*	*La Grange*
Davis, Oliver Loundes	*EE*		*Chicago*
Davis, Paul Newhall	*Agr*	*97*	*Arlington Heights*
Davis, Philip Frank	*Agr*	*28*	*Windsor Mills, Quebec*
Davis, Raymond Ellis	*CerE*	*29*	*Danville*
Davis, Roberta Lee	*SS*	*8*	*Champaign*
Davis, Samuel Sylvester	*Agr*	*111*	*Newport, Indiana*
Davis, Thomas Whitman, B.S. *(Miss. A. & M. Coll.)* 1904	*SS*	*5*	*Kosciusko, Mississippi*
Davis, Veronica	*Mus*		*Bondville*
Davis, Ward Owen	*Agr*	*8*	*Ramsey, Indiana*
Davis, Zachary Stephen	*AE*		*Chicago*
Dawson, Helen Mamie	*LAS*	*96*	*Morris*
Dawson, Louis Edward	*ChE*	*24*	*Springfield*
Dawson, Owen Lafayette	*Agr*		*Orland*
Day, Curtiss LaQ	*Bus*	*31*	*Gibson City*
Day, Dorothy	*LAS*		*Chicago*
Day, Harry Warren	*Agr*	*34*	*Shelbyville*

Day, Milo Frank	*SS*	7	*Weeping Water, Nebraska*
Day, Vincent Stephen	*ME*	43	*Springfield*
Day, Walter Thomas	*L sp*	33	*Springfield*
Deahl, Neulon	*Ch*		*Champaign*
Deakman, Homer Ward	*CE*	108	*Chicago*
Deal, Edwin Jahn, B.S. *(Univ. of Michigan)* 1914	*Agr*		*Detroit*
Dean, Hazel, A.B. *(Northwestern Univ.)* 1913	*Lb*		*Rolla, Missouri*
Dean, Olive Gertrude	*LAS (SS)*	19	*Harrisburg*
Dean, Vaughn Waldow	*Bus*		*Decatur*
Deaver, Lister Alward	*Cer*	135	*Bloomington*
DeCamp, Joseph Edgar, Ph.D. *(Univ. of Michigan)* 1914	*LAS sp*		*Batesville, Arkansas*
Decker, Arthur Eli	*SS*	4½	*Augusta*
Decker, Benjamin Harrison	*EE*	109	*Brazil, Indiana*
Decker, Edna Mae	*HSAgr*	39	*Chicago*
Degen, Albert Gustav	*AE*	55	*Kansas City, Missouri*
Deiss, William Charles	*EE (SS)*	108½	*Carlinville*
DeLong, Charley Townsend	*Agr sp*	29	*Foosland*
DeLong, Willard Earl	*Bus*	41	*Foosland*
Dempsey, John Patrick	*CE*		*Buffalo, New York*
Dempster, Charles	*ME*	59	*Chicago*
Demuth, Jack Erwin	*CE*	108	*St. Louis, Missouri*
Deneweth, Amelia Elizabeth	*Mus sp*		*Mt. Clemens, Michigan*
Denick, Milo Frank	*ME*	37	*Lockport*
Denison, Irving Alson	*Agr*		*Washington, D. C.*
Denison, Sidney Alexander	*SS*	2½	*Bridgeport*
Dennis, Rose Carolyn	*HSLAS*	22	*Glencoe*
Dent, Richard Wilmer	*ME*		*Urbana*
Denz, Raymond Edward	*LAS*	70	*Decatur*
Derby, Harold Leslie	*CE*	71½	*Kirksville, Missouri*
Derby, Sylvester Randall	*CE*	108	*Morgan Park*
Deremiah, Charles Wesley	*SS*	½	*St. Elmo*
DeSwart, Clarence Gordon	*EE*	124½	*Chicago*
Detering, Oscar Casper	*Bus*	9½	*St. Louis, Missouri*
Detrick, Florence Jay	*HSAgr*		*Sterling*
Deuchler, Gustave Herman	*AE*		*Aurora*
Deveneau, George Adams, Ph.B. *(Univ. of Chicago)* 1912	*Lb*		*Chicago*
Devlin, John Lester	*LAS(SS)*	21	*Chicago*
Dewar, Matthew Barr	*EE*		*Harrisburg*
Dewey, Elmer Clarence	*Bus*	31	*Rockford*
DeWolfe, Lucy Leonora	*LAS*	60	*Assumption*
Dexter, Grace Ella, A.B., 1911	*SS*		*Urbana*
Dexter, Lulu Belle, A.B., 1914	*Mus*	166	*Urbana*
Dial, Tully Smith	*Agr*		*Childress, Texas*
Dibelka, James Charles	*Med*		*Chicago*
Dibell, Harry Charles	*Bus*	63½	*Wolcott, Indiana*
Dick, Clyde Danforth	*LAS (SS)*	38	*Chicago*
Dickson, Gerald Edgar	*LAS*		*Hampshire*
Dieckmann, Thomas Wilbur	*Bus (SS)*	112½	*Wagoner, Oklahoma*
Dieffenbacher, Martha Mitchell	*SS*	27½	*Havana*
Diehl, Lloyd Millard	*Agr sp*		*Mt. Morris*
Dieserud, Helge Christopher	*ME*		*Washington, D. C.*
Dietiker, Edward	*Agr*		*Greenville*
Dietmeier, Clarence Richard	*Bus*	61½	*Winslow*
Dietmeier, Homer Ray	*Med*		*Winslow*
Dietz, John Wamser	*Bus*		*Belleville*
Dietzer, Alice Margaret	*HSLAS*	102	*La Grange*
Dikis, Alfred	*Agr sp*	26	*Waverly*
Dillavou, Essel Ray	*L*		*Champaign*
Diller, Harold Francis	*Med*		*Rantoul*
Dimmitt, LeNoir, A.B. *(Univ. of Texas)* 1911	*Lb*		*Austin, Texas*
Dingledine, Ira Wilbur	*LAS*	118½	*Peoria*
Dippell, Carl Bush	*AE*	3¼	*Freeport*
Dippell, Ralph Ellsworth	*AE*	3½	*Freeport*
Dirks, Bernhard Ernst George	*A*	127½	*Dresden, Germany*
Dix, Earl Joseph	*EE*	105	*Marseilles*
Dobbins, Verne Foster	*EE*	112	*Champaign*
Dodds, Donald Chambers	*Bus*		*Champaign*
Dodds, Josephine	*LAS*	31	*Champaign*
Dodds, Lois Ellen	*LAS*	6¼	*Champaign*
Dodge, Hovey Worsdell	*CE*	62	*Chicago*
Doe, Weastell Taylor	*LAS*	30	*Kent, Ohio*
Doeden, Nellie Render	*SS*	6½	*Cape Girardeau, Missouri*
Doerr, Clarence Leo	*Agr*		*Chicago*
Doerscher, Willis Harry	*Bus*	10	*Chicago*
Doherty, Everett	*Agr*	109	*Fairmount, Indiana*
Doherty, Francis Laurence	*Agr (SS)*	51½	*Urbana*
Doherty, Margaret Isabella	*Mus (SS)*	91	*Urbana*
Dolan, James Leo	*Agr*	32	*Champaign*
Dole, Ethel Mary	*HSAgr (SS)*	100½	*Champaign*

Dole, Laura Emily	*Mus*	*33*	*Champaign*
Dole, Lillian Dora	*LAS (SS)*	*103½*	*Champaign*
Domas, Justin Aloysius	*LAS*	*106*	*Shelbyville*
Donaldson, Harold James	*Agr*	*49*	*Polo*
Donaldson, John Riley	*CE*	*75*	*Joliet*
Donn, Merrill Carr	*LAS*	*27½*	*Chicago*
Donnell, Allan Douglas	*EE*	*75*	*Mattoon*
Donovan, Leo Francis	*Med*		*Jacksonville*
Doolen, Clem Daniel	*EE*		*Centralia*
Doolen, Glen Wesley	*Med*		*Centralia*
Doran, Myron John	*LAS*		*Chicago*
Doremus, Walter Louis, Jr.	*Agr sp (SS)*	*34*	*Montclair, New Jersey*
Dorris, Sylvanus Alpheus	*SS*		*Isabel*
Dorsett, Mary Elva	*HSLAS*	*92*	*Augusta*
Dorschler, Leonard Leslie	*CE*		*Chicago*
Doty, Dorothy Lanning	*LAS*		*Wilmette*
Doty, Helene Eleanore	*LAS*		*Wilmette*
Dougherty, Robert Hughes	*Agr*		*Peoria*
Dow, Harvey Richard	*Bus*	*60*	*Geneva*
Dowell, Carl Philip	*Agr*	*30*	*St. George, New York*
Downey, Durbin Ralph	*Agr*	*53*	*Sheffield*
Doyle, Bertha	*HSLAS*		*Red Cloud, Nebraska*
Doyle, John Francis	*Bus*	*57*	*Champaign*
Doyle, William James	*Bus*		*Champaign*
Drake, Charles Arthur	*LAS(SS)*	*3*	*Denver, Colorado*
Drake, Waldo Hiram, A.B., 1911	*SS*		*Stonington*
Dralle, Henry Edward	*EE*	*73*	*Champaign*
Draper, Arthur William	*LAS*	*32*	*Chicago*
Draper, Laurence Francis	*ME*	*37*	*Clinton*
Drew, Harold Alvah	*Ch*		*Dixon*
Drew, Mildred Evangeline	*LAS*	*7¼*	*New Albany, Indiana*
Droste, Louis Anthony	*Bus*	*63*	*Grand Rapids, Michigan*
Dubin, Henry	*A*	*111*	*Chicago*
DuBois, Lenore	*Mus*	*31*	*Peoria*
DuBois, Martha Harriet	*SS*	*70½*	*Eldorado*
Duffy, John Clarence	*Agr(SS)*	*71*	*Ottawa*
DuFrain, Frank James	*SS*	*112*	*Momence*
DuHadway, Fred Alan	*L*	*69*	*Jerseyville*
Duke, Harrison Reed	*Med*	*28*	*Chicago*
Dumas, Velma Burdette	*Mus*		*Cicero*
Dumke, Mildred	*LAS*		*Elmhurst*
Dunavan, Frank Leroy	*CE*	*85*	*Ottawa*
Duncan, Richard Forrester	*Agr*	*30*	*La Grange*
Duncan, Russell Eugene	*Bus*		*Penfield*
Duncan, Ruth Anna	*SS*	*13*	*Mt. Sterling*
Duner, Sven	*Agr*	*96½*	*Wheaton*
Dungan, George Harlan	*Agr sp*	*34*	*Richwood, Ohio*
Dunham, Lawrence Henry	*ChE*	*102*	*La Salle*
Dunham, Richard	*EE*	*74*	*Vinton, Iowa*
Dunlap, David Woods	*Agr*	*108½*	*Champaign*
Dunlap, Effie Charlotte	*LAS*	*87*	*Urbana*
Dunlap, Fanny, Ph.B. *(Univ. of Iowa)* 1905	*Lb*	*52*	*Champaign*
Dunlap, Francis Ellsworth	*A (SS)*	*73½*	*Maywood*
Dunlop, Leonard Eugene	*A*	*28½*	*Urbana*
Dunn, Elizabeth Moore	*SS*	*130*	*Bellflower*
Dunn, Georgiena Evelyn	*HSLAS*		*Hinsdale*
Dunn, Ulys Stephen	*EE*	*37*	*Dorrisville*
Dunseth, Roy Clarence	*SS*	*8*	*Peoria*
Dupre, Valentine Harry	*EE*	*33½*	*Chicago*
Durborow, Allan Cathcart	*Bus*		*Lake Bluff*
Durfey, Donald	*LAS*	*30*	*Tolono*
Durfey, Dorothy	*Mus sp*		*Tolono*
Durst, James Edwin	*Agr sp*		*Quincy*
Dutton, Herbert Buell	*ME*	*37*	*Oak Park*
Dutton, Marshall Simeon	*MSE*	*108*	*Oak Park*
Duzenbury, Grant P.	*Med*		*Watseka*
Dvorak, Joseph	*A*		*Chicago*
Dyer, Ethel Golden	*SS*	*8½*	*White Hall*
Dyer, Lucien Beverstock	*CE sp*		*Hoopeston*
Dykeman, Audrey	*SS*	*82½*	*Streator*
Dysart, Benjamin Quincy	*Med*	*71*	*Granville*
Dzen, Peter T	*RCE*		*Szecheun, China*
Eade, Ben Cooper	*Agr*	*34*	*Elizabeth*
Eagleton, Ben Pierce	*Agr*		*Peoria*
Early, James M.	*SS*		*Pettysville, Indiana*
Eart, Bess	*LAS*	*68*	*Anderson, Indiana*
Eaton, Rea Lincoln	*Agr*		*Eaton, Colorado*
Eaton, Rex Carr	*Agr*	*69*	*Eaton, Colorado*
Eckstein, Henry Charles	*LAS*	*127½*	*Peoria*
Edgar, Edith	*LAS*	*99*	*Greensboro, Maryland*
Edwards, Edith Anne	*HSLAS*	*106*	*Indianapolis, Indiana*
Edwards, Gail Phillips	*Ch*		*Chicago*
Edwards, Harlan Hammond	*Agr*	*77*	*Chicago*

Edwards, M. Reece	*Agr (SS)*	*46*	*Urbana*
Edwards, Morgan Fred, Jr.	*Agr*	*36½*	*Chicago*
Egan, Lillian Elizabeth	*HSAgr*		*Quincy*
Eggert, Glenn Hallis	*LAS*	*22*	*Canton*
Ehrlich, Maximilian Charles	*Med*	*30*	*Chicago*
Eichberg, Adrian J.	*LAS*		*Chicago*
Eicher, Eugenia	*HSAgr*	*62*	*Chicago*
Eichhorn, William Hirschel	*Agr*		*Mound City*
Eickelberg, Herman Daniel	*SS*		*Waterloo, Iowa*
Eide, Alwin Clyde	*ChE*	*106*	*Lee*
Eiker, Bessie Hamilton, A.B., 1911	*SS*		*Sparta*
Ekstrand, Henry Emanuel	*A*	*9¼*	*Waukegan*
Elder, Alice Mildred Roach	*LAS*	*96*	*Augusta*
Eleazarian, Aram Movses	*EE*	*125*	*Teheran, Persia*
Eleson, Eugene Robert	*Med*	*24*	*Elkhart, Indiana*
Elles, Edward Charles	*Bus*	*103*	*Herrin*
Elliott, Arthur Roland	*Agr*	*60*	*Tonica*
Elliott, Dana Milton	*ME*	*26½*	*Matteson*
Elliott, Isabel	*LAS*		*Beresford, S. D.*
Elliott, Robert Tollington	*RCE*	*29*	*Wilmington*
Ellis, Harvey	*Bus*	*64*	*Evanston*
Ellsworth, Mark Wesley	*CE*	*32½*	*Libertyville*
Elston, Alexander, A.B., 1913	*MSE*	*152*	*Cumberland, Maryland*
Elton, Alexander Stuart	*ME (SS)*	*61*	*Oak Park*
Elwell, Dan William	*Bus*		*Champaign*
Emch, Walter	*CE*	*6*	*Urbana*
Emmond, Wyatt Goen	*Bus*	*63*	*La Grange*
Endicott, John Graham	*AE*		*Carmi*
Enelow, Helen	*LAS*		*Chicago*
Engelland, Edmund Franciscus	*EE*		*Grant Park*
England, Grace Adelaide, A.B. *(Albion Coll.)* 1910	*Lb*	*61*	*Detroit, Michigan*
Engle, Jeannette Morrison	*LAS*	*99*	*Urbana*
Engle, Ralph Nelson	*Agr*	*72*	*Urbana*
Engle, Robert Henry	*Agr (SS)*	*43*	*Freeport*
Engle, Thomas Jason	*LAS*		*Trenton, Missouri*
English, Frank	*ME*		*Springfield*
English, Lloyd Hayden	*Med*	*77*	*Chicago*
English, Robert Wallace	*Agr*	*7*	*Bloomington*
Eninger, Helen Marie	*LAS*	*97*	*Arthur*
Ensor, Madge Viola	*HSLAS*		*Ridgefarm*
Epinger, John George	*Bus*	*81*	*Quincy*
Epstein, Karl	*Agr*	*33*	*Bloomington*
Erbes, Bertha	*Agr*	*50*	*Centralia*
Erdman, Roy Alfred	*Agr*		*Geneseo*
Erickson, Edward Bringle	*MSE*	*38½*	*Chicago*
Ernest, Delta Queena	*SS*	*6*	*Carlyle*
Ernest, Ruth	*LAS (SS)*	*95*	*Urbana*
Ernst, Carl Paul	*CE*	*82*	*Chicago*
Ernst, Elmore George	*A*	*87½*	*Visalia, California*
Erwin, Elizabeth	*HSLAS*	*54*	*Rockford*
Erwin, Walter Boynton	*Bus*	*97*	*Chicago*
Eskelson, Minnie	*SS*	*6½*	*Abingdon*
Eskelson, Ola Mattie Josephine, M.S., 1913	*SS*	*8*	*Villisca, Iowa*
Eslick, Leo	*ME*	*112*	*Lead, South Dakota*
Etienne, Leonard Arthur	*EE*	*70*	*Centerville Station*
Ettinger, Charles McKinley	*CE*	*35*	*Bourbon, Indiana*
Euston, Jacob Howard	*EE*		*Richmod, Virginia*
Evans, Donald Grover	*EE*	*42*	*Champaign*
Evans, Floyd Evan	*ME*	*37*	*Hinckley*
Evans, Mrs. Frederick Nobel	*Mus*		*Urbana*
Evans, Julia	*Mus sp*		*Otisco, Indiana*
Evans, Vera Kate	*Mus sp*		*Champaign*
Evans, Wallis Johnson	*ME*	*25*	*Kenilworth*
Everham, William Edward	*ME*	*45*	*Chicago*
Everhart, Philip Hiram	*LAS*	*111*	*Champaign*
Ewer, Warren Badger	*AE*	*45*	*Chicago*
Ewert, Earl Cranton	*LAS*	*30*	*Danville*
Excell, Stuart William	*CE*	*36*	*Chicago*
Eyman, Margaret	*HSAgr*	*29*	*Oak Park*
Fackler, Orpheus A.	*SS*	*24*	*Alvordton, Ohio*
Fagan, Ellen	*SS*		*St. Charles*
Fager, Eugene Philip	*Ch*		*Murphysboro*
Fager, George Edward Kirchner	*Agr*		*Murphysboro*
Fairbanks, Berthier Wesley	*Agr*	*70*	*Chicago*
Fahrnkopf, Charles Frank	*SS*	*4*	*Decatur*
Fair, Sue Mabel, A.B., 1909	*SS*		*Chrisman*
Fairlie, Margaret Carrick	*SS*	*4½*	*Urbana*
Fairman, Charles	*LAS*		*Alton*
Falder, Gerald Hartley	*LAS*	*17*	*Macomb*
Faletti, Michael Joseph	*L (SS)*		*Taft*
Farah, Salim Raji	*Agr*	*51½*	*Nazareth, Palestine*

Fargo, Mrs. Roy Newton	*Mus sp*		*Urbana*
Farley, Frank Webster	*Agr*	*99*	*Jonesboro, Arkansas*
Farmer, Elma Leola	*Agr*		*Belleville*
Farmer, Orena	*LAS*	*104*	*Belleville*
Farnam, Bertha Lucille	*LAS*	*22½*	*Pawnee*
Farnham, Albert Ayrton	*Agr*	*70*	*Westfield, Massachusetts*
Farrand, Ralph Parker	*Bus*		*Griggsville*
Fasold, Alice Margaret	*Med*	*30*	*Glode, Pennsylvania*
Fasold, Miriam Rebecca	*LAS*	*70*	*St. Louis, Missouri*
Faulk, Merrill Clifford	*LAS*	*33*	*Urbana*
Faulkner, Fay Edward	*LAS (SS)*	*115*	*Champaign*
Faurote, Guy Columbus	*A*	*108*	*Niles, Michigan*
Fauth, Irene Mae	*HSLAS*		*Aurora*
Fay, Donald Allen	*Bus*	*33*	*Urbana*
Fedde, Ruth Catherine	*HSLAS*	*85*	*Peotone*
Federmann, Charles Russell	*A*	*91*	*Brookville, Indiana*
Fehrman, Florence	*LAS*	*98*	*Pekin*
Feldman, Joseph Elmer	*Agr*	*82½*	*Morrison*
Feldman, Nathan	*Med*		*Chicago*
Felger, Walter Blaine	*Ch*	*97½*	*Cheadle, Alberta*
Felmley, John Benjamin	*AE*	*6*	*Normal*
Felsenthal, Emma, B.L.S., 1912	*SS*	*67*	*Urbana*
Felton, Harold Norton	*EE*	*37*	*Mendota*
Feng, Kaimin Kay	*CE*	*110½*	*Pei-lui, China*
Ferguson, Clarence Milford	*Agr*	*105*	*Grand Forks, North Dakota*
Ferguson, Florence Roxana	*HSLAS*	*64*	*Annawan*
Ferguson, Frank Cleveland	*LAS*	*67*	*Annawan*
Ferguson, George Alonzo	*A*	*36*	*Washington, D. C.*
Ferguson, Howard Ritchey	*LAS*	*36*	*Champaign*
Ferguson, James	*SS*	*8½*	*Trimble*
Ferguson, Kate Dorothy	*Lb sp*		*Weymouth, England*
Ferrell, Cyrus Porter	*EE*	*74*	*El Paso*
Fetherston, James Edward	*Med (SS)*	*94½*	*Gronard, Alberta*
Feuer, Bertram	*ChE*	*8*	*Chicago*
Fickett, Edward Maynard	*Agr*		*Chicago*
Field, Howard, Jr.	*ME*	*36*	*Wilmette*
Field, Roswell Francis	*LAS*	*89½*	*Chicago*
Fielding, Mabel	*Mus*	*79*	*Champaign*
Fields, Floyd Logan	*Agr*	*31*	*Anderson, Indiana*
Fienhold, Harry John	*Agr sp*	*28*	*Pontiac*
Fiero, Elmer Ellsworth, A.B., 1914	*L*	*21*	*New York City*
Fifield, Clarence Eugene	*Bus (SS)*	*70*	*Buda*
Finley, Margaret Alice	*LAS*		*Hoopeston*
Finley, Marion Reece	*Agr*	*33*	*Hoopeston*
Finn, Edmund Matthew	*AE*	*45*	*Lawrence, Massachusetts*
Finnegan, James Henry	*Agr*	*88*	*Brimfield*
Finney, Calvin Jonathan	*LAS(SS)*		*Greenup*
Finney, Stella Belle	*SS*	*130½*	*Bismark*
Finnigan, Martha Mary	*LAS*		*Champaign*
Finnigan, Thomas Joseph	*LAS*		*Champaign*
Firebaugh, Richard David	*LAS*	*38*	*Robinson*
Fischer, Lucy Caroline	*HSAgr sp*		*Bensenville*
Fischer, Mary Louise	*HSAgr sp*		*Bensenville*
Fischer, Ralph	*Agr*	*34*	*Freeport*
Fischer, Walter Rathfon	*Med*	*56½*	*Chicago*
Fish, Julian Lounsbury	*Agr*	*39*	*Buffalo, New York*
Fish, Vivian Mary	*SS*	*8½*	*Benton*
Fisher, Abigail Eliza	*LAS*		*Geneseo*
Fisher, William Arthur	*SS*	*7*	*Ogden*
Fisher, Clarence	*Agr*	*5*	*La Grange*
Fisher, Clarence John	*LAS*		*Chicago*
Fisher, Erwin	*Bus*	*70*	*Chicago*
Fisher, Forrest A., B.S., 1911	*Agr sp*	*137½*	*Greenup*
Fisher, Frederick Harrington	*Bus*		*South Bend, Indiana*
Fisher, Harry Eastman	*MSE*	*51*	*Chicago*
Fisher, Helen Vastine	*LAS*	*66*	*Geneseo*
Fisher, Ronald Mitchell	*REE*	*37*	*Indianapolis, Indiana*
Fishman, Alvin Texas	*Agr*	*80½*	*Bosky Dell*
Fisk, Fritz Harris	*L*	*15½*	*De Kalb*
Fitch, Howard J.	*Agr*	*33*	*Rockford*
Fitch, Joseph Gibson	*LAS*	*13*	*Madison, Wisconsin*
Fites, Herald B.	*Agr*	*33*	*South Bend, Indiana*
Fitzgerrell, Jack Allen	*Agr*	*77½*	*Ewing*
Fitzgerrell, Sylvester Stanton	*LAS*	*42*	*Benton*
Fitzpatrick, James Claude	*MnE*	*34*	*Gillespie*
Flannery, Charles Abusdal	*ME*	*41*	*Chicago*
Fleck, Arthur William	*A*	*35*	*Indianapolis, Indiana*
Fleming, Andrew Edward	*Agr*		*Melrose Park*
Fleming, Denna Frank	*LAS sp*	*7½*	*Paris*
Fleming, Sara Adelaide, A.M., 1912	*SS*		*Danville*
Flemming, John Herman	*A*	*37*	*Davenport, Iowa*
Fletcher, Mabel Elizabeth Billing	*SS*	*8*	*Decatur*
Fletemeyer, Frederick Rudolph	*AE*	*76½*	*Lafayette, Indiana*

Flexer, Edna Helen	*HSLAS*	*18*	*Joliet*
Flock, Marguerite Pauline	*LAS*		*Urbana*
Flock, Ward John	*Agr*	*31*	*Urbana*
Flodin, Harold Leo	*ME*	*108*	*Chicago*
Flood, Grace	*LAS*	*26*	*Terre Haute, Indiana*
Flood, Martin	*EE*		*Cortland*
Floyd, Florence Mallery	*Lb sp*		*Long Beach, California*
Fluke, Autha Maybelle	*LAS*		*Chicago*
Fogg, Alden Knowlton	*CE*	*108*	*McConnell*
Fogler, Harry Leroy	*SS*	*8*	*Westfield*
Fogler, Mayor Farthing	*Agr*		*Vandalia*
Fong, Mon Charles	*SS*	*51*	*Alvarado, California*
Fontaine, Everett Orren	*LAS (SS)*	*102*	*Momence*
Foote, Lorenzo Stephen	*Agr sp*		*Stronghurst*
Ford, Hanby Lewis	*Med*	*32*	*Flat Rock*
Forkey, Mildred Lillian	*HSAgr*	*61*	*Prophetstown*
Forsythe, Albert Ernest	*ChE(SS)*	*5*	*Pt. Antonio, Jamaica*
Fortune, Cynthia Ann	*LAS*		*Springfield*
Forty, Frank Alfred	*EE*	*108*	*Chicago*
Forward, Mary Cornelia	*SS*		*Urbana*
Foster, James Clifford	*Agr*		*Bradford*
Foster, Dean Lester	*EE*	*20*	*Puxico, Missouri*
Foster, Donald DeVere	*Bus*	*113*	*Boswell, Indiana*
Foster, Frank Ward	*EE*	*56*	*Alexis*
Foster, George Henry	*ChE*	*31*	*Lenox Dale, Massachusetts*
Foster, Ralph Nave	*ME*		*Attica, Indiana*
Foster, Richard Baxter	*LAS*		*Chicago*
Foulke, Claude Clifton	*Bus*	*63*	*Worthington, Indiana*
Foulke, Ronald Edward	*EE*		*Aurora*
Fowler, Wiley Marion	*Bus*	*112*	*Penfield*
Fox, James Leslie	*MSE*	*55*	*Englewood, New Jersey*
Fox, Jessie Lucilla	*HSAgr*	*23*	*Urbana*
Fox, Ray Stewart	*SS*		*Urbana*
Fox, Ruth Leda	*LAS*	*34*	*Upper Montclair, New Jersey*
Frail, James Eddis	*SS*	*26½*	*Lafayette*
Frailey, Lester Eugene, A.B., 1914	*SS*		*Urbana*
Frame, Warren Aaron	*Bus*		*Milford*
Francis, Arthur Lewis	*Bus*		*Chicago*
Francis, Helen Elizabeth	*LAS*	*62*	*Wyoming*
Fraser, Mrs. Alice Eaton	*Mus sp*		*Champaign*
Fraser, Cecil Eaton	*LAS*		*Champaign*
Fraser, Thomas	*MnE*	*37*	*White Hall*
Frayer, Disk Sylvester	*CE*	*109*	*Maywood*
Frazee, Anna Dora	*LAS*	*85*	*Moweaqua*
Frazer, George Carlyle	*Agr*	*101½*	*Lockport*
Frazier, Arthur Owen	*LAS*	*92*	*Paris*
Frazier, Walter Stephen	*LAS*	*36*	*Aurora*
Freark, Park West	*MSE*	*75*	*Champaign*
Freark, Ray Henry	*Med*		*Champaign*
Frederick, Eugene Mark	*Agr*	*33*	*Clarence*
Freels, John William	*L*	*28*	*East St. Louis*
Freeman, Kilburn Bartlett	*CE*	*33*	*Champaign*
Freeman, Marie, A.B., 1913	*HSLAS*	*131*	*Urbana*
Freer, Arthur Warren	*CE*	*43*	*Chicago*
French, Ida Bertram	*SS*		*Medora*
French, Randall White Burns	*Agr*		*Muskegon, Michigan*
Freund, Gustave Louis	*ChE (SS)*	*10*	*New York City*
Frey, Hollis Oldfield	*EE*	*28*	*Secor*
Frick, Arthur Henry	*Agr*		*Champaign*
Fried, Harry Nathan	*Agr*	*33*	*Chicago*
Frier, John	*ME*	*73½*	*St. Louis, Missouri*
Fries, John Edmund	*SS*		*Waterford, Wisconsin*
Frison, Theodore Henry	*LAS*		*Champaign*
Froehlich, Hugo Ferdinand	*EE*	*79*	*St. Louis, Missouri*
Frohardt, Elmer Philip	*Agr*	*21½*	*Granite City*
Froman, Cleo Russell	*L*	*59*	*Golden, Colorado*
Frost, Walter Kilborn	*Bus*		*Rockford*
Fruland, Ruth Myrtle	*LAS*	*22*	*Sheridan*
Frye, Fred	*Med*		*Swayzee, Indiana*
Frye, Hazel Mary	*LAS*	*81*	*Fairbury*
Fuller, Elizabeth Genevieve	*LAS*	*96*	*Chelsea, Michigan*
Fuller, Harold Couton	*A*	*107*	*Indianapolis, Indiana*
Fullerton, Theron Bushnell	*SS*	*101*	*Ottawa*
Fulton, Guy Chandler	*A*	*98*	*Warsaw*
Fung, Yu Nan	*Agr*	*17*	*Hunan, China*
Funk, Ruth Scovell	*HSAgr*	*26*	*Urbana*
Furr, Paul M	*Agr*	*40*	*Carbondale*
Gabel, Helen Louise	*LAS*	*32*	*Belvidere*
Gabriel, Carson King	*Med*	*33*	*Payson*
Gaddis, Jessie Maria	*Mus (SS)*	*88*	*Champaign*
Gage, John Howard	*LAS*	*63½*	*Texico*
Gaines, Mary Glendora	*HSLAS*		*Broadlands*
Gallagher, Fred Barron	*MSE*		*Rockford*

Gallaher, Harold	*EE*	*62*	*Tiskilwa*
Gallivan, Lyle Hugo	*AE*		*Champaign*
Galster, Alma Lydia	*SS*	*8*	*Tower Hill*
Galster, Augusta Emilia	*SS*	*3¼*	*Tower Hill*
Galvin, Paul Vincent	*Bus*	*27*	*Harvard*
Gambach, Jacob C, A.B., 1906	*SS*	*8*	*Hecker*
Gamble, Clare Curtiss	*Bus*	*102*	*Valleyfield, Canada*
Gannaway, Lelia Maude	*LAS*		*Gays*
Gants, Elwyn Tracy	*ME*	*75*	*Wenona*
Gantz, Howard Stanley	*Agr (SS)*	*30*	*Champaign*
Garber, Alfred Emanuel	*Agr (SS)*	*40*	*Gibson City*
Gardiner, John Low	*LAS (SS)*	*101*	*Chicago*
Gardner, Franc John	*ChE*	*32*	*Chicago*
Gardner, McKinley	*LAS*		*Auburn*
Garrett, Texie Elizabeth	*LAS sp*		*Dixon, W. Va.*
Garrison, Edith Grace	*Mus*		*Urbana*
Garten, William Raymond	*LAS (SS)*	*113*	*Odon*
Garth, Casper Tyrrell	*Bus*	*26*	*Beaumont*
Garvey, Edward James	*SS*	*32*	*Faribault, Minnesota*
Gary, Jesse Lehman	*CE*		*Carmi*
Garza, Roman de la	*CE*	*54*	*Cabinas, Hidalgo, Mexico*
Gassett, Leo Everet	*Agr*		*Lincoln*
Gatlin, Mae	*Bus*		*Waukegan*
Gauger, Joseph Frederick	*Agr*	*65*	*Champaign*
Gauger, Raymond Wallace	*LAS*	*53*	*Champaign*
Gaunt, Gail	*LAS*	*11*	*Mound City*
Gaut, Rosa-Lee, B.Mus., 1912	*LAS*		*Champaign*
Gay, Ernest Hubbard	*Agr(SS)*	*38*	*Quincy*
Gay, Grace Amelia	*SS sp*	*31*	*Quincy*
Gayle, Robert Edwin	*Agr (SS)*	*66*	*Lincoln*
Gaynor, Gertrude Genevieve	*Mus sp*		*Grand Rapids, Wisconsin*
Gehant, Evelyn Ella	*HSAgr*	*65*	*Dixon*
Gehant, George Modiste	*Agr (SS)*	*30*	*Dixon*
Gehant, Rosalie Florence	*HSAgr*	*59*	*Dixon*
Gehlbach, Oscar Herman	*Bus*		*Lincoln*
Gehrig, Edward Franklin	*ME*	*103*	*Grantfork*
Geib, George Albert	*CE*	*88*	*St. Paul, Minn.*
Geiger, Charles Francis	*CerE*	*108*	*Chicago*
Geiger, Lester Charles	*Bus*		*Mendota*
Geiler, Frank Herman	*L*	*30*	*Mansfield*
Geisendorfer, Karl Edward	*Agr*	*46*	*Pittsfield*
George, Leslie Godfrey	*L*		*Staunton*
Gerlach, Alma	*HSLAS*		*Doniphan, Missouri*
Gerling, Richard William Herman	*CE*		*Bloomington*
Gernand, Paul	*Agr*		*Danville*
Gernard, Oliver Perry	*Agr*	*34*	*Rossville*
Gerten, Nicholas	*CE*	*43*	*Chicago*
Geselbracht, Howard Cyril	*Agr*	*33*	*Chicago*
Gettys, Ruth Hortense	*LAS*	*32*	*Chicago*
Gewalt, Carl Henry	*A*		*Breckenridge, Minnesota*
Geyer, Denton Loring, Ph.D.,1914	*SS*	*6½*	*Madison*
Geyer, Grace Mildred	*LAS*	*67*	*Roswell, New Mexico*
Gherganoff, Penco	*CE sp*		*Lovetch, Bulgaria*
Ghislin, Lloyd Havins	*Bus*		*Oak Park*
Ghormley, Harry Knox	*SS sp*	*8*	*North Yakima, Wash.*
Gibbons, Maud Alberta	*LAS*	*30*	*Metropolis*
Gibson, Charles Rannells	*Agr sp*	*19*	*Hanover Centre, Mass.*
Gibson, Harry Wilson	*Bus*	*8*	*Muskogee, Oklahoma*
Gibson, James Raymond	*Bus*		*Chicago*
Gibson, Mable Helen	*HSAgr (SS)*	*107*	*Woodstock*
Gibson, Oscar Harry	*LAS*	*60*	*Norwood*
Gibson, Sylvia Rose	*LAS*	*33*	*Chicago*
Gibson, Thomas Robert	*Bus*		*Chicago*
Giddings, Mate Lewis	*HSLAS*	*30*	*Danville*
Gideon, Alva Jennings	*LAS*		*Oklahoma City, Oklahoma*
Gideon, Charles Russell	*LAS*	*30*	*Oklahoma City, Oklahoma*
Giertz, Arthur Edward	*CE*	*33*	*Elgin*
Giesler, James Raymond	*Bus*	*35*	*Muscatine, Iowa*
Gifford, Ralph Egley	*Bus*	*35*	*Onarga*
Gift, Lyle Henry	*Agr*	*37*	*Peoria*
Gilbert, Arthur Abbott	*EE*	*37*	*Pana*
Gilbert, James Harman	*L*	*28*	*Mt. Vernon*
Gilbert, Minnie Ellen	*LAS*	*53½*	*Dillon, Montana*
Gildner, Ellsworth Lowell	*AE*		*Atlantic City, New Jersey*
Giles, Louis Wentworth	*AE*		*Washington, D. C.*
Gilkey, John Ray	*Agr (SS)*	*83½*	*Hume*
Gill, Clarence Scott	*RCE*		*St. Louis, Missouri*
Gill, George Thallon	*Agr*	*122*	*Evanston*
Gill, Grant William	*Agr*		*Evanston*
Gill, Ivan C	*Agr*		*Albion*
Gillen, Ira Edward	*LAS*		*Racine, Wisconsin*
Gillham, Willard Clark	*ME*	*34*	*Edwardsville*

Gilmore, Leonard Mason	*Agr*	95½	*Moline*
Gilpatrick, Gladys	*HSAgr*	34	*Plano*
Ginter, Clarence Marshall	*EE*		*Peotone*
Girhard, Harold Raymond	*LAS*		*Newton*
Glass, Charles Neilson Dorland	*Agr*		*Chicago*
Glassco, Roy Thomas	*Agr*	95	*Denhoff, North Dakota*
Glassco, Ruth Marie	*HSAgr*	28	*Urbana*
Glenn, Edna	*SS*	18½	*Mt. Vernon*
Glenn, Murray Otto	*LAS*	61½	*Magnolia*
Glessing, Barbara Frances	*LAS*	72	*El Paso*
Glick, Everett E	*Agr*	76½	*Rochester, Indiana*
Glover, Clarence Washburn	*L*		*Ottawa*
Glover, Donald Mitchell	*Med*	71	*Urbana*
Glover, Leonard Wood, A.B.1912, B.Mus.1914	*SS*		*Urbana*
Glover, Rodney Champlin	*L*	57	*Ottawa*
Glover, Walter Earl	*A*	113½	*Topeka, Kansas*
Gluck, Arthur Louis	*CE*		*Minneapolis, Minnesota*
Gnaedinger, Robert Joseph	*ChE*	59	*Chicago*
Goddard, James Douglas	*Med*		*Marion*
Godehn, Reuel Ariel	*AE*	76	*Moline*
Godfrey, Eleanor	*LAS (SS)*	117	*Urbana*
Godfrey, Frank	*Bus*		*Staunton*
Godowsky, Ulysses Gilbert	*Med*		*Chicago*
Goebel, Irma Gretchen	*LAS*	97	*Urbana*
Goebel, Ruth	*SS*	4½	*Streator*
Goelitz, Walter Adolph	*Agr*		*Ravina*
Goelitz, William Henry	*Bus*	86	*Oak Park*
Goetz, Antoinette Helen. A. B., *(Iowa State Univ.)* 1906	*Lb*	52	*Iowa City, Iowa*
Goff, Roy Allen	*Agr*	140	*Galesburg*
Gogerty, Henry L	*A*	88	*Zearing, Iowa*
Goldberg, Charlotte Deana	*LAS*	33	*Chicago*
Goldberger, Henry Joseph	*CE*	46	*Chicago*
Golden, Wesley Barton	*Bus*	103	*Champaign*
Goldin, Harold Edward	*A*		*Chicago*
Golding, John Noble, Jr.	*Agr sp*		*New York City*
Goldman, Ellis Ralph	*CE*	12¼	*Rockford*
Goldschmidt, Erna Claire	*HSLAS*	32	*Davenport, Iowa*
Goldschmidt, Samuel Meyer	*Bus*	68	*Aurora*
Goldsmith, Frank French	*Agr*	16½	*Watapa*
Goldstein, Robert Sidney	*RCE*	62	*Chicago*
Gomez, Arzapalo Ernesto	*CE*	111	*Guadalajara, Mexico*
Gomez, Arzapolo Ramiro	*Bus*		*Mexico City, Mexico*
Gonzaga, José Cesar	*CE*	20	*Rio de Janeiro, Brazil*
Gooch, Dewitt Robert	*Agr*		*Bellflower*
Gooch, Gretchen Louise	*LAS*	66	*Bellflower*
Good, Elizabeth	*Mus sp*		*Urbana*
Goode, Eslanda Cardoza	*HSLAS*	16	*Bayport, Long Island*
Goodell, Horace Holbrook	*CE*		*Beardstown*
Gooding, Laura Lavonia	*SS*	¼	*Belleville*
Goodman, Albert Nelson	*A*		*La Salle*
Goodman, Cyril James	*Bus sp*		*Chicago*
Goodman, Edwin Rheinstrom	*CerE*		*Terre Haute, Indiana*
Goodman, Willard Gaddis	*Bus*		*Champaign*
Goodman, Eva Marie	*HSLAS*	28	*Champaign*
Goodrich, Robert James	*ChE*	61	*N. Brookfield, Mass.*
Goodsmith, Howard Moulding	*SS*	4½	*Chicago*
Goodwin, John Hanford	*Agr*		*Champaign*
Gore, Roy Cletis	*LAS*		*Urbana*
Gorey, George Francis	*MSE*	37	*Joliet*
Gormley, Vincent Lewis	*Agr*	40½	*Chicago*
Gossett, Vera Ople	*LAS*	96	*Casey*
Goudy, Don Coleman	*ME*	32½	*Fairfield*
Goudy, William John	*ME*		*Fairbury*
Gougler, Mildred H	*SS*		*Ipava*
Gould, Anthony Ready	*Agr (SS)*	41	*Urbana*
Gould, Maurice Augustus	*CE*	33	*New Sharon, Iowa*
Gouwens, Estey William	*Bus sp*	30	*South Holland*
Grabbe, John Christian	*Agr*	67	*Urbana*
Grace, Floyd Vivian	*LAS*		*Metropolis*
Grace, George Lee	*L sp*		*Metropolis*
Graham, Elizabeth Ellen	*LAS*	8¼	*East Dubuque*
Graham, Harland Brown	*Agr*	37	*Los Angeles, California*
Graham, Walter Thompson	*SS*	7	*Kinmundy*
Graham, William Morland	*LAS*		*Almyra, Arkansas*
Grant, Clarence Todd	*EE*	7¼	*Elgin*
Grant, Ruth Margaret	*HSLAS*	61	*Urbana*
Grantz, Raymond Lorimer	*L*		*Rockford*
Grape, Nellie Washington	*SS*	6	*Chicago*
Graven, Anker Suerre	*A*	48	*Menominie, Wisconsin*
Graves, Frank Wilkinson	*Agr (SS)*	38	*Silver Creek, New York*
Graves, Nellie Ruth	*HSLAS*	21	*Champaign*
Graves, Perry Henry	*Bus (SS)*	98	*Rockford*

Gray, Claudia Marie	*LAS*		*Palmyra, Missouri*
Gray, Cora Emeline, M.S. *(Univ. of Chicago)* 1909	*Mus*		*W. Palm Beach, Florida*
Gray, James Madison	*Bus*	¼	*Decatur*
Gray, Leslie Roy	*EE*	36	*Odell*
Gray, Otto Benton	*Agr*		*Maroa*
Gray, Ralph Edward	*Cer*	32	*Arcola*
Gray, Ruth	*HSLAS*	56	*Des Moines, Iowa*
Grayhack, John Edward, Jr.	*CE*	7¼	*Joliet*
Green, Alexander	*Mus sp*		*Champaign*
Green, Alta	*LAS*	98	*Urbana*
Green, Dorothy May	*SS*	6	*Morrisonville*
Green, Esther Cranston	*HSLAS*		*Urbana*
Green, Eulalie	*HSLAS*	98	*Oakwood*
Green, Gladys	*HSLAS*	32	*Oakwood*
Green, Ralph	*CE*	108	*Chicago*
Greenberg, David	*Bus*		*Chicago*
Greenburg, Roland Everett	*ME (SS)*	134	*Champaign*
Greene, Joel Waring	*LAS*		*Urbana*
Greene, Joseph Nathaniel	*Agr*	104	*Chicago*
Greenfield, Richard Fletchard, Jr.	*ME*		*Chicago Heights*
Greengard, Louis Jacob	*Agr (SS)*	80	*Chicago*
Greenhill, Harold	*ME*	36	*Chicago*
Greenspahn, Abraham	*LAS*		*Chicago*
Greenwell, Earl Eugene	*ChE*	34	*Harvey*
Gregg, Marion Elsie	*HSLAS*	29	*Chicago*
Gregory, Emma	*SS*	7½	*Normal*
Gregory, James Henry	*Bus*		*Aurora*
Gregory, Joseph Van Clief	*ME*	63	*Kansas City, Missouri*
Gregory, Lewis Throckmorton, A.B., 1913	*Med*	131	*Chicago*
Gregory, Malcolm White	*AE*		*Knightstown, Indiana*
Gregory, Porter Tate	*EE*		*Fulton, Kentucky*
Gregory, Richard Earl	*CE*		*Mowcaqua*
Greison, Hans Peter	*Bus*	56	*Savanna*
Grewe, Charles Henry	*Agr*		*Lawrence, Michigan*
Grey, Newton Fox	*Agr*	61	*Evanston*
Gridley, William Whitney	*Bus*	69	*Amboy*
Grieser, Grandison Lloyd	*LAS*	34	*Quincy*
Grieser, Leroy Oliver	*Agr (SS)*	62½	*Quincy*
Griffin, Jack Mitchell	*Agr*	96½	*Evanston*
Griffith, Burdette	*Agr*	26	*McNabb*
Griffith, Francis Dickerson	*Agr*	70	*Chicago*
Griffith, Mildred Elizabeth	*LAS*	124½	*Ashton*
Griffith, Stanwood John	*Agr*		*Ashton*
Griffith, Vernon Sumner	*Cer*		*Clinton*
Griffiths, David Wood	*AE*		*Oak Park*
Griftner, James Howard	*MnE (SS)*	113	*Champaign*
Grigg, Jerome Bruner	*MnE*		*Joplin, Missouri*
Grigsby, Hugh	*Agr*	65	*Medina, Mexico*
Grigsby, Melborn Redmond	*SS*	8	*Petersburg, Indiana*
Grimmer, Marguerite Esther	*LAS*	¼	*St. Louis, Mo.*
Gripp, Elmore Albert	*RCE*		*Moline*
Griswold, George Durfee	*ME*	108	*Chicago*
Gronlun, Hubert Kenyon	*AE*	28	*Elgin*
Gross, Charles Raymund	*LAS*		*Chicago*
Gross, Christian	*Agr*	28	*Chicago*
Gross, Dorothy Lillian	*HSLAS*		*Carlyle*
Gross, Meda Floy	*LAS*	85½	*Monticello*
Grossberg, Victor Hubert	*L*		*Chicago*
Grossman, Donald Ashway	*L*	30	*Champaign*
Grossman, Ralph Emery	*LAS*	69	*Champaign*
Grossman, William Abraham	*ME*		*Peoria*
Grotevant, Nina	*HSLAS*		*Pekin*
Grover, Donald Dana	*AE*		*Rockford*
Gruhl, Clarence James	*AE (SS)*	64	*Milwaukee, Wisconsin*
Grundy, Charles Edwin	*SS sp*	7½	*Morrisonville*
Gruner, Elmer John	*EE*	68	*Speer*
Gruner, Raymond William	*EE*	2	*Speer*
Grunewald, Augustus Henry, Jr.	*Agr*	109½	*Chicago*
Grunewald, Herman C	*CE*	85	*St. Louis, Missouri*
Gruny, George Robert	*Agr*		*Camp Point*
Gudbrandsen, Kirsten Johanna	*LAS*		*Chicago*
Guernsey, Ernest William	*ChE*		*Vincennes, Indiana*
Guffin, Lillian Irene	*LAS*	94	*Urbana*
Guhl, Marvin Charles	*Med*		*Freeport*
Guild, Lois Green	*HSAgr*	53	*Urbana*
Guilliams, Gordon Baudouine	*Agr*		*Evanston*
Guimaraes, Ary de Segadas Machago	*EE*	26	*Rio de Janeiro, Brazil*
Gulick, Edward E, B. L. 1892	*SS*	7	*Champaign*
Gulick, Mrs. Jessie	*SS*		*Carbondale, Kansas*
Gulley, Sanford Joseph	*ME (SS)*	9½	*Urbana*
Gum, Harry Allen	*ME*	72	*Marseilles*
Gumm, Leslie Monroe	*EE*	73	*Marseilles*

Gunkel, Woodward William	*Bus*	*58*	*Sheffield*
Gunnell, Palmer Mackenzie	*L*	*56*	*Wichita, Kansas*
Gunther, Felix Arno	*EE*	*37*	*Quincy*
Gustafson, Carl Albert	*AE*	*37*	*Fort Dodge, Iowa*
Gustafson, George Philip	*Bus*	*67*	*Sycamore*
Guy, George Arthur	*L sp*		*Austin, Minnesota*
Guynn, Ina Merle	*HSAgr sp*		*Charles City, Iowa*
Guynn, Jesse Frederick	*Agr*		*Dewey*
Gwinn, Edith	*HSLAS*	*110½*	*Champaign*
Haag, Vernon William	*Ch*	*103*	*Mazon*
Haaker, Harold Henry	*A*		*Omaha, Nebraska*
Haan, George William	*Med*	*93*	*Aurora*
Haas, Orville Francis	*EE*		*El Paso*
Haase, Elizabeth Elsa	*HSLAS*		*Oak Park*
Hachman, Logan Fred	*L (SS)*		*Evansville*
Hackley, Elizabeth Pursel	*LAS*	*31*	*Urbana*
Hackley, John Hale	*EE*		*Marengo*
Hada, Katsuki	*LAS*		*Kochi City, Japan*
Hadden, Chester Gilbert	*Agr*	*69*	*Chicago*
Hadley, Lillian	*Mus*		*Cambridge*
Hadley, Maude	*SS*	*6*	*Greenup*
Hagan, Thomas Angus	*Agr*	*70*	*Champaign*
Hagan, Warren Lynn	*SS*	*8½*	*Windsor*
Hagener, Arthur	*CE (SS)*	*115*	*Beardstown*
Hager, Henry Merritt	*Bus*	*35*	*Dwight*
Haggott, William Stiles	*EE*	*108*	*Keokuk, Iowa*
Hagler, Kent Dunlap	*LAS*		*Springfield*
Hague, Stella Mary	*SS*	*22*	*Auburn, Indiana*
Hahn, Fred Charles	*ChE*	*69*	*Springfield*
Haines, Forrest Livingston	*Bus*	*69*	*Urbana*
Hair, Arthur J	*EE*		*Greenville*
Haish, Theodore Adam	*Agr*	*29*	*Hinckley*
Hakanson, Arthur Ferdinand	*ChE (SS)*	*109½*	*Chicago*
Hake, Mrs. Minnie Etta Thomas	*LAS*	*71½*	*St. Louis, Missouri*
Halas, George Stanley	*Cer*	*6*	*Chicago*
Halas, Walter Henry	*AE*	*97*	*Chicago*
Halbruge, Charles Morgan	*Bus*	*61*	*Rockport, Indiana*
Haldeman, Glenn Merlin	*EE*	*5*	*Ponca City, Oklahoma*
Hall, Charles Myron	*CE*	*36*	*Burlington, Iowa*
Hall, Edward Knight	*Agr*		*Ladybrand, S. Africa*
Hall, Emory George	*Bus*	*31*	*Rockford*
Hall, George Ross	*L*	*2¼*	*Oak Park*
Hall, Helen Evalyn	*HSAgr*		*Attica, Indiana*
Hall, Janie	*SS*	*8*	*Rural Hill*
Hall, Joseph Lowe	*ChE*		*Sullivan*
Hall, Kenneth Canright	*EE*	*10*	*Chicago*
Hall, Lisle Gwynne	*SS*	*130½*	*San Francisco, California*
Hall, Marion	*Agr sp*		*Quincy*
Hall, Mary Helen	*SS*		*East Liverpool, Ohio*
Halliwell, Pauline	*LAS*	*80*	*Chicago*
Halstrom, Bernhard Christian	*AE*	*17*	*Chicago*
Halterman, Henry James	*ME*	*131½*	*Anna*
Haltom, Horace Marie	*LAS*	*76*	*Brooklyn, Indiana*
Halushka, Gertrude	*LAS*	*102*	*Chicago*
Hamann, Christian F	*CE*	*14*	*Rockport*
Hamill, Eugene Carl	*AE*	*103*	*Bloomington*
Hamilton, Chauncey Geyer	*Bus*	*34*	*Colfax*
Hamilton, Cliff Struthers	*ChE*	*119*	*Monmouth*
Hamilton, Don Herman	*Agr*	*31*	*Paris*
Hamilton, Donald Alan	*A*	*28*	*Spokane, Washington*
Hamilton, Tom Sherman	*Ch*	*33*	*Paris*
Hamilton, William Jacob	*LAS*		*Lathom*
Hammitt, Andrew Baker	*AE*	*112*	*St. Paul, Minnesota*
Hammond, Asaph Chandler	*Agr*		*Warsaw*
Hammond, Leonard Aaron	*Agr*		*Warsaw*
Hammond, Lucinda Belle	*LAS*		*Chicago Heights*
Hancock, Myron Scott	*EE*	*37*	*Beecher City*
Hancock, Walden Wood	*Bus*		*Casey*
Handley, Anna	*SS*		*Albion*
Hanford, Marguerite Mary	*LAS*	*91½*	*Carbondale*
Hanger, Paul Newton	*Agr*	*32*	*Urbana*
Hanley, Emil Wiley	*LAS*		*Rensselaer, Indiana*
Hanmore, John Leon	*L*	*5*	*Urbana*
Hannah, Harry Ingalls, A. B., 1913	*L*	*62*	*Urbana*
Hannush, Paul	*Agr*	*83*	*Paterson, New Jersey*
Hanschman, Fred Robert	*A*		*Dolton*
Hansen, Andrea Theodora	*SS*	*4*	*Chicago*
Hansen, Auker Fred	*A*		*Oshkosh, Wisconsin*
Hansen, Clarence Magnus	*Med*		*Racine, Wisconsin*
Hansen, Stanley	*ME*	*80*	*Chicago*
Hanson, Mrs. Harriet Roman	*LAS*	*29*	*Washington, D. C.*
Hao, Tso Chang	*Bus (SS)*	*92*	*Wuchinghsien, China*
Harbarger, Lelia Merle	*Agr*	*143½*	*Hamden, Ohio*

Hardesty, Albert Vergil	*Agr*		*Homer*
Hardesty, Bonnie Jean	*LAS*	*21*	*Homer*
Hardesty, Gladys Mabel	*SS*	*3*	*Homer*
Hardie, Francis Clarke	*Agr*		*Waukegan*
Hardiman, Leo Bernard	*AE*	*36*	*Los Angeles, California*
Harding, Albert Austin	*SS*	*107*	*Champaign*
Hare, Fay Charles, A. B., 1913	*SS*	*130*	*Gilman*
Hargrave, Kathleen	*SS*		*Nashville, Tennessee*
Harland, Marion Boyer	*Agr*		*Washington, Iowa*
Harmon, Homer Noah	*SS*	*3*	*Walsh*
Harmon, William Thomas	*SS*	*8*	*Jacksonville*
Harnish, Wilbur Eugene	*SS*	*7½*	*Mechanicsburg, Pa.*
Harper, Chester C	*Agr*		*Ogden*
Harper, Ernest Glenn	*LAS (SS)*	*25½*	*Glasford*
Harper, Homer Munda	*Agr sp*		*East St. Louis*
Harper, Julia Alberta, A. B., 1913	*Mus*	*141*	*Urbana*
Harpole, Tillman Hardy	*LAS*	*29*	*St. Louis, Missouri*
Harris, Alice Irene	*LAS*	*27*	*Elgin*
Harris, A Ross	*EE (SS)*	*52*	*Vinita, Oklahoma*
Harris, Charles	*ME*		*Washington, Indiana*
Harris, Elizabeth Payne	*LAS*	*31*	*Champaign*
Harris, Elodia Fern	*HSLAS*	*72*	*Marion*
Harris, Gordon Turner	*Bus*		*Bismark, North Dakota*
Harris, Hannah Hahn	*LAS*	*40*	*Champaign*
Harris, Herbert Henry	*Agr*	*104*	*Madison*
Harris, Leo Gabriel	*Bus (SS)*	*72*	*Wilton Junction, Iowa*
Harris, Lois Myrtle	*LAS*	*107*	*Sheldon*
Harris, Mandel H	*A*	*105*	*Chicago*
Harris, Robert Bruce	*Agr*		*Gilman*
Harris, William Rutledge	*L*		*Macomb*
Harrison, Alice Sinclair	*SS*		*Austin, Texas*
Harrison, Benjamin Samuel	*LAS (SS)*	*5*	*Villa Grove*
Harrison, Edward Arthur	*Agr*		*Morris*
Harrod, Byrd Henry	*AE*	*32*	*Fort Wayne, Indiana*
Harsch, Eugene Milton	*Agr*	*108*	*Peoria*
Harshbarger, Everett Leonard	*Agr*	*29½*	*Ladoga, Indiana*
Hart, Albert	*EE*		*Galatz, Roumania*
Hart, Archie Harrison	*Agr*	*48*	*Grand Chain*
Hart, Herbert Earle	*L*	*45*	*Westfield, Massachusetts*
Hart, Marion Murphy	*LAS*		*Benton*
Hart, Richard Nelson	*Agr*	*58*	*Brighton*
Hart, Roland Emerson	*EE*	*110*	*Cleveland, Ohio*
Hart, William Ward	*L*	*25*	*Benton*
Hartford, Naoma R	*LAS*	*98*	*Champaign*
Hartigan, Frank J	*Bus*		*Chicago*
Hartley, Omer	*Agr*		*Mattoon*
Hartman, Laura Ellen	*LAS*	*76*	*Milford*
Harver, Robert Allen	*ME*		*Fairfield*
Hartwell, Godfrey	*AE*		*La Porte, Indiana*
Harvey, Eugene James	*EE*	*5*	*Chicago*
Harvey, Ralph Frame	*Agr*	*65½*	*Indianapolis, Indiana*
Harward, Mary	*SS*		*Washington, Indiana*
Harwood, Sylvan Dix	*LAS*	*71*	*Carrollton*
Harz, Albert William	*Agr (SS)*	*38*	*Champaign*
Haskett, Leslie Dougherty	*SS*	*8*	*Neoga*
Haslund, Roy Harrison	*A*		*Minneapolis, Minnesota*
Hatcher, Charlotte Louise	*SS*		*Clinton*
Hatfield, Helen Gertrude	*HSLAS*	*3*	*St. Louis, Missouri*
Hatfield, William Durrell, B.S. *(Illinois Coll.)* 1914	*SS*	*7*	*Jacksonville*
Hathaway, Earl Edgar	*CE*		*Harvey*
Hathorne, Marjorie	*HSLAS*	*34*	*Waukegan*
Hathorne, Wade Sherman	*Ch*		*Waukegan*
Hattenhauer, Robert Clinton	*ME (SS)*	*75*	*Peru*
Hauber, Carl	*A (SS)*	*103½*	*Springfield, Missouri*
Haulman, Orrin Winfield	*SS*	*8*	*Springfield, Ohio*
Haumesser, Arnold	*ME*		*East St. Louis*
Hawes, Henry Clifford	*Bus*	*64*	*Atlanta*
Hawkins, Emin Witherspoon	*Agr*	*60*	*Fairmount*
Hawkins, James Summer	*Bus*	*29*	*Marion, Indiana*
Hawkins, Marjorie Deane	*LAS*	*89⅜*	*Chicago*
Hawkinson, Carl Otto	*AE (SS)*	*74*	*Marquette, Kansas*
Hawver, Paul Loren	*SS sp*	*8*	*Decatur*
Hayes, Earle Melville	*Agr*	*32*	*Kings*
Hayes, Edward Bean	*LAS*		*Urbana*
Hayes, James Raymond	*Bus*		*Janesville, Wisconsin*
Hayes, Ora Lee	*SS sp*		*Urbana*
Hayne, Walter Elliott	*EE*		*Chicago*
Hazen, Cecil Reeder	*Agr*		*Champaign*
Head, Glenn Lloyd	*SS*	*8*	*Sciota*
Headley, Francis Leo	*Agr*	*70*	*Paris*
Healey, George Warren	*LAS*		*Rensselaer, Indiana*
Healy, Fred Albert	*Agr*	*104*	*Aurora*

Healy, Verne	*Agr*	17½	*Clarence*
Heath, Dwight Frederick	*LAS*	66	*Chicago*
Heath, Edith Mary	*LAS*	101	*Urbana*
Heath, Lewis David	*Agr*		*Oxford, Indiana*
Heath, Monroe	*LAS*	45	*Chicago*
Heath, Trevor Morse	*Agr*	92	*Toledo, Ohio*
Hecker, Charles	*Mus sp*		*Urbana*
Hecketsweiler, Roy Thomas	*LAS*	53	*Area*
Heckler, Leo Chysostem	*EE*	38	*Harvey*
Hedgcock, John Franklin	*Agr*	116	*Plymouth*
Hedgcock, John Harrison	*Agr*	117	*Plymouth*
Hedgcock, Nellie May	*HSLAS*	68	*Plymouth*
Hedges, Bertram A	*LAS*	34	*La Grange, Missouri*
Hedrick, Edna May	*LAS*		*Le Roy*
Hedrick, George Samuel	*Agr*	69	*Le Roy*
Heegard, Thusnelda	*SS*		*Elmhurst*
Heeschen, Richard George	*ChE*	38	*Davenport, Iowa*
Hegener, Archie Leo	*LAS*	34	*Bluff Springs*
Hegner, John Robert	*EE*	34	*Stuttgart, Arkansas*
Hein, Mary Rachel	*HSAgr*	45	*Champaign*
Hein, Mason August	*Agr*	33	*Champaign*
Heindel, John Harold	*AE*	74	*Elgin*
Heindel, Spencer Rehbock	*CE*	37	*Stockton*
Heineke, Paul Henry	*L*		*Streator*
Heinzelmann, Alfred Martin	*ChE (SS)*	113	*Aurora*
Helander, Linn	*ME*	137	*Chicago*
Helgeland, Lillie Isabel	*LAS (SS)*	106½	*Elliott*
Heller, Henry Frederick	*Med*		*Des Plaines*
Helm, Harry Gray	*LAS*		*Grayville*
Helm, Herbert Clarence	*LAS*	76	*Metropolis*
Helmreich, Agnes Johanna Sophia	*SS*	7½	*Crescent City*
Helper, Kenneth Louis	*Agr*	34	*Henry*
Hemphill, Chester Abram	*Agr*	119	*Jacksonville*
Henderson, Alexander Swift	*LAS*	67	*Chicago*
Henderson, Frank Spoor	*EE*	94½	*Sterling, Colorado*
Henderson, James Bruce	*Agr*	127	*Millers Ferry, Alabama*
Henderson, John Charles	*ME*		*Urbana*
Henderson, Ted	*Agr*		*Ridgefarm*
Henle, Edward Joseph	*LAS*		*Muscatine, Iowa*
Henley, Margaret Dickey, A.B. *(Earlham Coll.)* 1914	*Lb*		*Indianapolis, Indiana*
Henn, Hildegard Anna Sarah	*HSAgr (SS)*	26	*Toluca*
Hennings, Elfreda Viola	*HSLAS*	60	*Elgin*
Henry, Mary Anne	*LAS (SS)*	100	*Paloma*
Henshie, Lura Mave	*LAS sp*		*Decatur*
Hensold, Harold Hartman	*Agr*	36½	*Tonica*
Henson, Margaret Emma Virginia	*Agr*		*Urbana*
Henson, Ray David	*L*	26	*Johnston City*
Hepburn, Mrs. M M	*Mus*		*Gilman*
Herbert, James John Michael	*LAS sp*	46	*Chicago*
Herdman, Margaret May, A.B., 1910	*Lb*	50	*Winnetka*
Herman, Ewald Emil	*ME*		*Highland*
Herman, Ralph Leroy	*EE*	108	*Woodbine*
Hermanson, Frank Alfred	*Bus*	65	*Milford*
Hess, Gaylord Ray	*SS*	107	*Momence*
Hess, Oral Vera	*HSLAS (SS)*	96	*Sidney*
Hester, Elizabeth	*Lb (SS) sp*	2	*Delaware, Ohio*
Hibbs, Jesse Branch	*LAS*		*Murfreesboro, Tennessee*
Hickey, Daniel Webster, Jr.	*EE*		*Aurora*
Hickman, James Burr	*Bus*	97	*Ashville, North Carolina*
Hicks, James Mason	*A sp*		*Mapleton Depot, Penns.*
Hicks, Otis Emory	*EE*		*Gibson City*
Hiedel, Leonard B	*Agr*	71	*Waterloo, Wisconsin*
Hiett, Harold C	*SS*	25½	*Keithsburg*
Higgins, Irma May	*HSLAS*	54	*Urbana*
Higgins, Margaret Elizabeth	*HSLAS*		*Urbana*
Higgins, Mary Marguerite	*HSAgr*	38	*Joliet*
Highberger, John Foster	*Agr*	38	*St. Paul, Minnesota*
Hilbert, John William	*Med*	37	*Chicago*
Hildreth, Leslie Marquis	*LAS*		*Broadlands*
Hill, Fanny Wilder, A.B., 1910	*Lb*	33	*Champaign*
Hill, Fred James	*Cer*	96	*Harvard*
Hill, Howard Rice	*Agr*		*Chicago*
Hill, James Edward	*Agr*	94	*Mattoon*
Hill, Lawrence Elias	*MnE*		*Chicago*
Hill, Lucy Belle	*Mus*	62	*Urbana*
Hill, Muriel Mary	*HSLAS*		*Urbana*
Hill, Ormond Perley	*ME*		*Urbana*
Hill, Robert Earl	*L*		*Champaign*
Hill, Roger Edward	*LAS*	46½	*Woodstock*
Hill, Stanley, A.B., 1913	*SS*		*Mattoon*
Hill, Warren Elliott	*Agr*	77	*East St. Louis*
Hillard, Lyndal	*LAS*		*Fairfield*
Hills, David Avery	*EE*	44½	*Evanston*

Hills, Louis John	*MSE*	*108*	*Joliet*
Hills, Thirza Louise	*HSAgr*	*31*	*Mattoon*
Hilpert, Martha	*HSAgr*	*32*	*St. Louis, Missouri*
Hilsabeck, Mildred Eugenia	*Mus*		*Windsor*
Himmelreicher, Walter August	*CE*	*36*	*Chicago*
Himstedt, Ralph Ebner	*LAS (SS)*	*69¾*	*Boody*
Hines, Lyle Wilbur	*Bus*	*21*	*Peoria*
Hinkle, Homer Marion	*SS sp*	*24*	*Dongola*
Hinkle, Mrs. Verna Ethel	*SS*		*Dongola*
Hinman, Robert Bruce	*Agr*	*102½*	*Dundee*
Hinman, Walker McConnel	*LAS*		*Dundee*
Hinrichs, Herbert Stassen	*Agr*	*29*	*Joliet*
Hinshaw, Amy	*LAS (SS)*	*105*	*Harrisburg*
Hinshaw, Joseph Howard, A.B., 1913	*L*	*15*	*Harrisburg*
Hinton, George Philip	*ME*	*108*	*Maysville, Kentucky*
Hinton, Stanley Winfield	*Agr*	*23*	*Foosland*
Hippard, Wesley George	*MnE*	*37*	*Belleville*
Hipple, Roy Everett	*Agr*	*34*	*Waterman*
Hirstein, John A	*Agr*	*35*	*Summerfield*
Hirt, Edward George, Jr.	*A*	*72*	*St. Cloud, Minnesota*
Hirth, Laura Edna	*HSAgr*	*79*	*Quincy*
Hirtzel, Clara Lillie	*LAS (SS)*	*101*	*Effingham*
Hitchcock, Earl Wilkie	*Agr*	*104*	*Hallowell, Kansas*
Hitt, Agnes Virginia	*HSLAS*	*94*	*Herrick*
Hitt, Katherine	*LAS*	*98*	*Chicago*
Hitt, Mabel	*LAS*	*70½*	*Herrick*
Ho, Nai Ching	*LAS (SS)*	*116½*	*Canton, China*
Hobart, Clyde Monroe, A.M., 1913	*SS*		*Urbana*
Hodge, Clarence Richard	*LAS*		*Oregon*
Hodge, John Reed	*AE*		*Carbondale*
Hoehn, Beatrice Eva	*SS*	*32*	*Carlinville*
Hoehn, Fremont John	*Cer (SS)*	*74*	*Carlinville*
Hoehnke, Herbert William	*AE*		*Sheboygan, Wisconsin*
Hoerner, Frank A	*LAS (SS)*	*113*	*Peotone*
Hoff, John LeRoy	*SS*	*76*	*Ottawa*
Hoffert, Anna Cathryn	*LAS*	*99*	*Pekin*
Hoffman, Aaron Andrew	*Bus*	*37*	*Dwight*
Hoffman, Arthur Christopher	*Agr (SS)*	*138½*	*Knoxville*
Hoffman, Louis Arthur	*ChE*	*31*	*Harvey*
Hoffman, Lucille Victoria	*Agr*		*Chicago*
Hoffman, Lynden Even	*Bus*	*70*	*Harvey*
Hoffman, Max Robert	*ME*		*De Pue*
Hoffman, Roy Albert	*EE*	*74*	*Aurora*
Hoffmann, George Herman	*Bus*	*32*	*St. Louis, Missouri*
Hogan. Harold Eugene	*ChE*	*54*	*Lanark*
Hoge, Hobart	*EE*		*Chicago*
Hohman, Elmo Paul	*LAS*	*71*	*Nashville*
Hohn, Harley Daniel	*Agr*		*Sycamore*
Hoit, Maurice Elon	*Agr*	*104*	*Geneseo*
Holaday, Kenneth Marion	*Ch*		*Mattoon*
Holecek, Albert Bernard	*L*		*Chicago*
Holinger, Arnold Carl	*AE*	*81*	*Chicago*
Hollandsworth, Helen Margaret	*LAS*	*32*	*Canton*
Holland, Henry Walter	*Agr*	*94*	*Highland*
Hollis, David Preston	*LAS*	*12*	*Urbana*
Hollister, Noble Parker	*Agr*	*123*	*Champaign*
Holloway, Doris Jean	*HSLAS*	*66*	*Detroit, Michigan*
Holman, George Cecil	*Agr*		*Tobias, Nebraska*
Holmburger, Max, Jr.	*ME*	*113*	*Chicago*
Holmes, Albert Allen	*SS*	*16*	*Augusta*
Holmes, Charles Vernon	*LAS*	*71*	*Manteno*
Holmes, Laura Clark	*HSAgr*	*31*	*West Chicago*
Holmes, Oliver Wendell	*EE*	*34*	*Greenfield*
Holtze, Harry Stevens	*AE*	*74*	*Sioux City, Iowa*
Homrich, Leslie	*SS*	*8*	*Galena*
Honey, Myrtle Eveline	*HSAgr*		*Dixon*
Honnold, Loie	*Agr*		*Kansas*
Hoo, Te-Chun	*MnE (SS)*	*16*	*Shin-Ning, China*
Hood, Clifford Firoved	*EE*	*108*	*Cameron*
Hopkins, Eugene Canfield	*Agr*	*30*	*Yorkville*
Hopkins, Gold Samuel	*Bus*	*75½*	*Champaign*
Hopkins, Samuel Curtis	*Bus*	*30*	*Urbana*
Horen, Louis	*CE*		*Venice*
Horimura, Hirosh	*EE*	*32*	*Ohita, Japan*
Hormel, Dorothy Stewart	*LAS*	*75*	*Wichita, Kansas*
Hormel, Olive Dean	*LAS*	*83⅓*	*Wichita, Kansas*
Hornal, William	*Agr*	*121*	*Champaign*
Horney, Warren Rees	*Agr*	*34*	*Colfax*
Hornkohl, Siegfried Irving William	*AE*	*72*	*St. Joseph, Missouri*
Horton, Claude Edward	*ME*	*48½*	*Dixon*
Horwich, David	*AE*		*Chicago*
Hosfield, Percy Charles	*CE*		*Faribault, Minnesota*
Hosford, Susan Eunice	*HSLAS*	*66*	*Geneseo*
Hoskins, Leonard Cunningham	*ME*	*36*	*E. Las Vegas, New Mexico*

Hoskins, William, Jr.	*LAS*	*99*	*La Grange*
Hoskinson, Bruce Quin	*SS*	*85*	*West York*
Hostetler, Joseph Columbus	*L*	*28*	*Decatur*
Hostetler, William Benton	*Bus*		*Decatur*
Hottes, Flora Emily	*LAS*		*Urbana*
Houchens, Josie Batcheller, B.L.S., 1905, A.M., 1912	*SS*		*Urbana*
Houg, Orville Adlai	*Bus*		*Dows, Iowa*
Hough, Charles Francis	*L*	*25*	*Danvers*
Hough, Estella Daisy	*SS*	*16½*	*Belleville*
Hough, Lawrence Donald	*A*		*Marcellus, Michigan*
Hough, Waldern Henry	*AE*	*76*	*Oak Park*
Houghton, Lowell Curtis	*Agr*		*Sheffield*
Hoult, Charles Howard	*LAS*		*Chrisman*
Houser, Irma L	*LAS (SS)*	*75*	*Farmer City*
Houston, Margaret	*HSAgr*	*57*	*Chicago*
Hovey, Howard Weston	*AE*		*Kansas City, Kansas*
Howard, Carl Gooch	*Agr*	*33*	*Benton*
Howard, Charles Gerard	*LAS (SS)*		*Oakwood*
Howard, Clara Eulalie	*SS*	*13½*	*Benton*
Howard, Mabelle Lorraine	*HSAgr*		*Le Roy*
Howe, Charles Ralph	*Agr*	*82*	*Champaign*
Howe, Josephine	*HSLAS*	*8*	*Mansfield*
Howe, Roger Faxon	*Agr*		*Chicago*
Howe, Sidney Peckham	*Agr*	*89*	*Macon, Georgia*
Howe, William Thomas	*Agr*	*82½*	*Champaign*
Howell, Grace Laura	*LAS (SS)*	*81½*	*Lewistown*
Howell, Paul J	*Bus*		*Beloit, Wisconsin*
Howells, Mary Georgia	*HSAgr*		*Staunton*
Howells, Ruth Cound	*LAS*		*Staunton*
Howk, Charles Dean	*LAS*	*9¼*	*Neoga*
Hsieh, Chung	*ME*	*8*	*Kirin City, China*
Hsieh, Zen	*EE (SS)*	*80½*	*Besung, China*
Hsun, Ching Lee	*LAS*	*25*	*Nan Chang, China*
Hu, Gor Hsi	*RCE*	*102*	*Canton, China*
Hubbard, Aden Elden	*SS*	*8*	*Avon*
Hubbard, Homer Clinton	*SS*		*Ida Grove, Iowa*
Hubbard, Lawrence Reid	*Bus*	*52*	*Auburn, New York*
Hubbard, Marie Esda	*Bus (SS)*	*99½*	*Hazen, Arkansas*
Hubbard, Margaret Elizabeth	*SS*		*Anna*
Hubbard, Willis Wilkinson	*A*	*76½*	*Beloit, Kansas*
Hubbart, Curtis Clay, B.S., 1909	*MnE (SS)*		*Rock Island*
Hubbell, Arthur Palmer	*LAS*		*Chicago*
Hubble, Brownlee Martin	*Agr*		*Jacksonville*
Huber, Andrew Joseph	*EE*	*30*	*Perryville, Missouri*
Hudson, Edith Elizabeth	*LAS*	*32*	*Chicago*
Hudson, Glenn Evans	*Agr*		*Sullivan*
Huff, Byron Robert	*LAS*		*Urbana*
Huff, Harry J	*SS*		*Stackport, Iowa*
Huff, James Orton, A.M., 1912	*SS*		*Frederick*
Huff, Marguerite Lydia	*LAS*	*30*	*Urbana*
Huffman, Eugene Stewart	*Ch*		*Rockford*
Hufford, Charles Thurman	*Agr*	*72*	*Carmi*
Hughes, Madeline	*SS*		*Downers Grove*
Hughes, Martin Collins	*EE*	*66*	*Berwyn*
Hughes, Walter Bertram	*SS*	*8*	*Carbondale*
Hughes, Mrs. Walter Bertram	*SS*	*3½*	*Carbondale*
Huggler, Lillian Frieda	*HSLAS*		*East St. Louis*
Hughitt, Anna Lue	*LAS*		*Escanaba, Michigan*
Huisken, Arthur Herman	*ChE*	*106*	*Chicago*
Huisken, Harry Arnold	*Cer*		*Chicago*
Hulburd, Hazel Emily	*HSLAS*	*27*	*Cleveland, Ohio*
Hulce, Ray Stillman, M.S., 1913	*Agr*		*Urbana*
Hull, Harter Barnes	*SS*	*24*	*Cincinnati, Ohio*
Hull, Sidney Marion	*Ch*	*97*	*Montello, Wisconsin*
Hultman, Ivar Nimes	*ChE*	*49*	*Chicago*
Hummeland, Ralph Wendel	*CerE*		*Melrose Park*
Humphrey, Arthur Gordon	*LAS*		*Palatine*
Humphrey, Kenneth Blaine	*EE*	*75*	*Waterloo, Wisconsin*
Humphreys, Robert Hatch	*L*		*Atkinson*
Hungerford, Charles Everett	*MSE*	*97*	*Loda*
Hunsley, Alice	*HSLAS*		*Champaign*
Hunt, Florence Jennie	*HSLAS*	*87*	*Ridott*
Hunt, Frank Sumner	*Cer*	*59*	*N. Brookfield, Massachusetts*
Hunt, Leslie Lyman	*Agr*	*51½*	*Sparland*
Hunter, Margaret	*HSLAS*		*Chillicothe*
Huntington, Homer Irving	*Agr*	*68*	*Chicago*
Hurdle, Ennis Carrol	*EE*		*Mt. Sterling*
Hurlbert, Vertner William	*AE*		*Robinson*
Hurlburt, Helen Elizabeth	*HSLAS*	*26*	*La Mesa, California*
Husband, Robert Maurice	*ME*	*102*	*Litchfield*
Husson, Harry Lee	*EE*	*87*	*Auburn*
Husted, Guy Harold	*Agr*	*93*	*Roodhouse*

Husted, Lee Alfred	*Agr*	*95*	*Roodhouse*
Husted, Merle Raymond	*Agr*		*Roodhouse*
Hutchins, Marjorie	*Mus*	*103*	*Urbana*
Hutchinson, Henry	*Agr sp*		*Langley Lodge, England*
Hutchinson, Lawton Hargrove	*EE*	*38*	*Little Rock, Arkansas*
Hutchinson, Oliver Cromwell Kemp	*ME*	*90*	*Menomtnee, Michigan*
Huxtable, Ruben Peterson	*Agr (SS)*	*20½*	*Kansas City, Missouri*
Hyde, Edith, B.A. *(Ohio State Univ.)* 1908	*Lb*	*33*	*Lancaster, Ohio*
Hyndman, Robert, Jr.	*EE*	*3*	*Cincinnati, Ohio*
Hypes, Mrs. Cora Edna Jackson	*LAS*	*7⅓⅓*	*Urbana*
Hypes, George William	*Agr*	*76½*	*Poe, West Virginia*
Hypes, James Lowell	*LAS*	*76½*	*Urbana*
Ide, Hiram Russell	*Agr*		*Washington, D. C.*
Ide, Lucile Mary	*HSLAS*	*34*	*Mineral*
Ihrig, Lester Werman	*CE*		*Oshkosh, Wisconsin*
Illick, Warren C	*Agr*	*16½*	*Burlington, Iowa*
Imes, Oliver Stanp	*EE*	*65*	*Macomb*
Ingalls, Horace Ballou	*Agr (SS)*	*63*	*Urbana*
Ingels, Sherman	*Agr*	*61*	*Lafayette*
Ingram, Ralph Lindsay	*Agr*	*2*	*Chicago*
Ingwers, Alfred Henry	*AE*		*Moline*
Inness, Lucy Mabel	*SS*		*Galesburg*
Irick, Carl Cuthbert	*Med*		*Pittsfield*
Irish, Joe Elder	*Bus*	*9*	*Oak Park*
Irvin, Letha Patterson	*LAS*		*Frankfort, Indiana*
Irvin, Stanley Pieffer	*LAS (SS)*	*93*	*Griffith, Indiana*
Isaacs, Thomas Ralph	*Agr*	*87½*	*Sorento*
Iwig, Howard Philip	*Bus*		*Peoria*
Jackman, Charles Harold	*ME*	*75*	*Elgin*
Jackson, Anna Elizabeth	*LAS*		*Champaign*
Jackson, Ernest Theodore	*SS*	*28½*	*Odin*
Jackson, John Evans	*Bus*		*Rocky Ford, Colorado*
Jackson, Mabel J	*LAS (SS)*	*110*	*Danville*
Jackson, Thomas Henry	*Agr*		*Champaign*
Jacobs, Clifford D	*SS*	*8*	*Trivoli*
Jacobsen, Walter Herman	*Bus*	*99*	*Urbana*
Jacobson, Bernard Edwin	*Agr*	*3*	*Chicago*
Jacobson, Henry George M	*Agr*		*Chicago*
Jahr, Myra Bertha	*HSLAS*		*Neillsville, Wisconsin*
Jain, Ranpit Singh	*EE*	*111*	*Delhi, India*
James, Edward Allen	*EE*	*110*	*Amboy*
James, Harriet Lillian	*HSLAS*	*41*	*Amboy*
James, Helen Dickson, A.M., 1913	*Mus*		*Urbana*
James, Lenton Willis	*Agr*	*92*	*Canton*
Janes, Nellie	*LAS*		*Kewanee*
Jannotta, Francis Skiff	*Bus*		*Oak Park*
Janssen, Elmer Theodore	*Bus*	*16*	*Sterling*
Jarmulusky, Louis	*EE*	*27*	*Maywood*
Jarnagin, Robert	*L*	*28*	*Shelbyville*
Jarrett, James Bruce	*EE*		*Danvers*
Jarvis, Rowling	*EE*	*85*	*Hinsdale*
Jarvis, William Bancroft, Jr.	*L*		*Chicago*
Jefferson, John Benjamin	*ME*	*109½*	*Chicago*
Jenkinson, Harry Samuel	*Med*		*Arlington Heights*
Jenkinson, Robert Edwin	*LAS*	*9*	*Arlington Heights*
Jenks, Philip Dorsey	*Ch (SS)*	*5*	*Indianapolis, Indiana*
Jenner, Lawrence Tenney	*Bus*		*Evansville, Indiana*
Jennings, Alma Irene	*SS*	*5*	*Champaign*
Jennings, Carson Gary	*CE*	*75*	*Carlinville*
Jennings, Grattan Gustavus	*Agr*		*Champaign*
Jennings, Leman	*Agr sp*		*Abingdon*
Jennings, Mary Iona	*HSAgr*		*Champaign*
Jennings, Walter Wilson	*LAS (SS)*	*112*	*Champaign*
Jensen, Jorgan Edward	*EE*	*10*	*Chicago*
Jensen, Milton Owen	*Bus*	*94½*	*Chicago*
Jervis, Florence May	*Mus*	*66*	*Champaign*
Jessen, Clifford Tvilstedgaard	*LAS*		*Alto Pass*
Jessen, Hubert	*Agr*	*100*	*Alto Pass*
Jewett, Eleanor Rountree	*Agr*		*Chicago*
Jewett, Fred Allen	*CerE*	*68*	*Burlington, Kansas*
Jez, Leo Charles	*Agr*	*116½*	*Chicago*
Jobst, Herman Robert	*A*	*31*	*Omaha, Nebraska*
Jockisch, Anna Zelma Elizabeth	*HSLAS*	*28*	*Beardstown*
Johns, Donald Charles	*MnE*	*62*	*Danville*
Johnson, Carl Eugene	*A*	*42*	*Chicago*
Johnson, Edna Louise	*LAS*	*39*	*Brimfield*
Johnson, Elmer Walfred	*CE*	*48*	*Batavia*
Johnson, Elfreth George	*Agr*	*46*	*Medora*
Johnson, Everett Louie	*Agr*		*St. Charles*
Johnson, Floyd Henning	*Bus*		*St. Charles*
Johnson, Gertrude Emily	*Mus sp*		*E. Galesburg*
Johnson, Harold Sucese	*A (SS)*	*120*	*Chicago*
Johnson, Harry Julius	*Agr*	*39*	*Gerlaw*

Johnson, Helen Margaret	*Bus*	*3¼*	*Plymouth, Indiana*
Johnson, Joseph Benjamin	*ME*		*Harrisburg*
Johnson, Julius Nicholai	*Bus*	*3¼*	*Elgin*
Johnson, Louis Samuel	*Agr*	*103*	*Champaign*
Johnson, Marcus Leonard	*CE*	*58*	*Park Ridge*
Johnson, Mary Fern	*LAS*	*66*	*Urbana*
Johnson, Maurice Carl	*ME*	*75*	*Omaha, Nebraska*
Johnson, Maynard Wayne	*Bus*	*78*	*Casey*
Johnson, Ralph Benjamin	*ME*		*Joliet*
Johnson, Robert Eugene	*EE*	*62*	*Lawrenceburg, Kentucky*
Johnson, Walter John	*Med*		*Chicago*
Johnston, Donald Compton	*Bus*		*Charleston*
Johnston, Dwight Irwin	*Bus*	*63*	*Seymour*
Johnston, Florence Ruby	*HSLAS (SS)*	*92*	*Champaign*
Johnston, Lillian Ruth	*HSLAS*		*Champaign*
Johnston, Mabel	*HSLAS*		*Carlyle*
Johnston, Paul Evans	*Agr*	*23*	*Milton*
Jones, Allen John	*Agr*		*Ridgefarm*
Jones, Alwin August	*Bus*	*27*	*Dewey*
Jones, Clifford Crouch	*Agr*	*118*	*St. Louis, Missouri*
Jones, David Robert	*CE*	*75*	*Streator*
Jones, Dudley Emerson	*A*	*36*	*Little Rock, Arkansas*
Jones, Earl Jesse	*Bus*	*31*	*Gilbert, Iowa*
Jones, Florence Dorcthea	*HSLAS*		*Raymond*
Jones, Frances Beulah	*HSAgr (SS)*	*31*	*Champaign*
Jones, Frank William	*Agr*	*3¼*	*Bloomington*
Jones, John Ellis	*Bus*		*Chicago*
Jones, J Russell	*Bus*	*66*	*Springfield*
Jones, Leola	*Mus sp*		*Perrysville, Indiana*
Jones, Marian Lucile	*HSAgr*	*18*	*Ft. Smith, Arkansas*
Jones, Milton Doerr	*EE*	*115*	*Raymond*
Jones, Orion Chester	*Med*	*45½*	*Redmon*
Jones, Paul Clifford	*EE*	*71*	*Henry*
Jones, Paul Erastus	*A*	*134*	*Claremore, Oklahoma*
Jones, Robert Taylor, B.S., 1912	*Mus*		*Urbana*
Jones, Tennyson Calvin	*LAS*		*Glencoe*
Jones, Walter Ortis	*Bus*	*32½*	*Champaign*
Jones, William Robert	*Agr sp*	*32*	*Kirkland*
Jordan, Ray Lewis	*A*	*3¼*	*Luverne, North Dakota*
Jordan, William McKinley	*Agr sp*		*Carroll, Ohio*
Joseph, Effie Catherine	*HSLAS*		*Hayden, Indiana*
Joyner, Mildred	*LAS*	*79*	*Harrisburg*
Judd, Elizabeth Gladys	*HSAgr*		*Champaign*
Judd, Mildred Marie	*HSLAS*	*22*	*Champaign*
Judson, Frank Monteath	*Bus*	*35*	*Aurora*
Jue, Jook Hing	*Bus*	*92*	*Canton, China*
Juergens, Robert Edward	*REE*		*River Forest*
Julian, Scott Millholland	*Agr*		*Little Rock, Arkansas*
June, Marjorie Marie	*HSLAS*	*96*	*Belvidere*
Jungkunz, Louis Frederic	*Bus*	*66*	*Freeport*
Kaar, Ruth Amanda	*LAS*	*91*	*Princeton*
Kadinsky, Max Joseph	*RCE*	*77*	*Chicago*
Kaempfer. Fred William E	*AE*		*Chicago*
Kahlert, Thomas Debenham	*Agr*	*67½*	*Carlyle*
Kaiser, Karl John	*Med*	*15*	*Aurora*
Kaiser, Olive May	*SS*	*4*	*Downing, Missouri*
Kalthoff, Frederick Caspar	*AE*		*Chicago*
Kamm, Rufus Maurice	*Ch*	*68*	*Highland*
Kamm, Wilbur Fred	*LAS (SS)*	*57½*	*Highland*
Kamp, Henry Wilbur	*LAS*	*32*	*Watseka*
Kane, Robert Clair	*EE*	*71*	*Warren*
Kane, William Harold	*ChE*	*27*	*Wellsville, New York*
Kang, Wai	*ME*	*36*	*Hong Kong, China*
Kantor, James	*EE*	*80*	*Chicago*
Karkow, Conrad Hansen	*LAS*		*Chicago*
Karn, A. H.	*SS*		*Grahamsville, Ohio*
Karr, William Malry	*Bus*		*Flora*
Karraker, Alvah Hugo	*Agr*	*79⅓*	*Dongola*
Karraker, Guy Wilford	*SS*	*130*	*Dongola*
Kasbeer, John Harold	*Bus*	*40*	*Normal*
Kasserman, Homer Frank	*L*		*Newton*
Kasten, William Henry	*Agr*	*52*	*Schenectady, New York*
Kathinsky, Francis	*Cer*	*16*	*Chicago*
Katz, Melvin Louis	*Bus*		*Mattoon*
Katzenberg, Herman Stanley	*AE (SS)*	*64*	*Chicago*
Kaufman, Willard Seaton	*A*		*Richmond, Indiana*
Kaufmann, Adolph Henry	*ChE*	*36*	*Chicago*
Kaup, George Albert	*Agr*	*16*	*Chicago*
Kawamoto, Tane Jonathan	*EE*	*98*	*Osaka, Japan*
Kayser, Clarence Samuel	*AE*		*Decatur*
Kayser, Laurence Maurice	*AE*		*Decatur*
Keach, Walter Moore	*Agr*	*65*	*Crothersville, Indiana*
Keagy, Abraham Reuel	*ME (SS)*	*36*	*Hot Springs, Arkansas*

Keatts, Rolla Merl	*ME*		*Maroa*
Keefer, Ruth Farwell	*SS*	130½	*Amboy*
Keen, Frances Ford	*LAS*	98	*Pueblo, Colorado*
Keener, Oro Sylvester	*Ch*	81	*Macomb*
Keese, Albert William	*Cer*	105	*Litchfield*
Keese, Homer Goldsmith	*Cer*	37	*Litchfield*
Keese, William John	*LAS*	79	*Ishpeming, Michigan*
Kehlor, James Malcolm	*ME*	78½	*Kenosha, Wisconsin*
Keiffer, Lawrence Raymond	*EE*		*Robinson*
Keigley, Claire Taylor	*ME*	97½	*Ames, Iowa*
Keith, Genevieve Emma	*LAS*		*Hinckley*
Keitoku, Sakai	*ChE (SS)*	50	*Fukushima, Japan*
Kell, Sherman Little	*SS*	53	*Kell*
Keller, Arthur Raymond	*CE*	81½	*Mt. Carmel*
Keller, Florence	*LAS*	108	*Ft. Wayne, Indiana*
Kelley, Henry Phillips	*Agr*	61	*Champaign*
Kelley, Iva	*LAS*		*Urbana*
Kelley, Mae Elizabeth, A. B. 1913	*SS*	130½	*Loda*
Kellogg, Amelia Lucinda	*LAS*	117	*Aurora*
Kellogg, Samuel Adams	*Agr*	104	*Wheaton*
Kelly, Everett Clyde	*Med*	33	*Chillicothe*
Kelly, Fred Hanford	*L*	29	*Mattoon*
Kelly, Henry Eli	*CE*		*Charleston*
Kelly, Jessie Maurene	*HSLAS*		*Atlanta*
Kelly, John Thomas	*ME*		*Oak Park*
Kemp, Arnold Raman	*Agr*	47½	*Waynetown, Indiana*
Kendall, Mary Lilly	*LAS*	22	*Farmer City*
Kennedy, Henry Sherwood	*Agr*		*Washington, D. C.*
Kennedy, Kaywin	*LAS*	33	*Minonk*
Kennedy, Luther Eugene	*SS*	130	*Springfield*
Kenner, Byron Florence	*ME*	94½	*Pasadena, California*
Kennett, David Herman	*CE*	37	*Milroy, Indiana*
Kenney, Myrtle	*SS*	6½	*Carbondale*
Kensel, Richard Reuben	*Mus sp*		*Oshkosh, Wisconsin*
Kenshalo, Ralph	*L*	28	*Fairfield*
Kent, Everett Frank	*Agr*	42	*Gridley*
Kent, Horace Ellsworth	*CE*		*Urbana*
Ker, Louraine Margaret	*LAS*		*Morgan Park*
Kern, Alfred Eidmann	*L*		*Belleville*
Kern, Florence Ellen	*HSAgr*	29	*Champaign*
Kern, Lowell Davidson	*SS*	7½	*Champaign*
Kern, Vernon Harlow	*Agr*	80½	*Gays*
Kernall, Mrs. Morris Johnson	*HSAgr*	133	*Urbana*
Kerner, Julius Caesar	*ME*	72	*Cicero*
Kernoll, Russell Twist	*AE*		*Rochester*
Kerr, Lyda Kathryn	*LAS*		*Urbana*
Kerr, Ralph	*Agr*		*Urbana*
Kerr, Volney Applebee	*ME*	4	*Wellsville, New York*
Kesl, Joseph, Jr.	*AE*		*Edwardsville*
Ketch, James Moss	*EE*		*Decatur*
Keusink, Helen Bertha	*LAS*	27	*Champaign*
Kewley, Robert James	*LAS*		*Santa Monica, California*
Keyes, Fanshawe Martin	*LAS*		*Chicago*
Kibbe, Leslie Arthur	*AE*	107	*Wheaton*
Kichlu, Kunja Behari	*EE*		*Manshi Bagh, India*
Kidd, Lilace Mazoe	*LAS sp*	11	*Astoria*
Kiessig, Paul Peter	*Agr*	37	*Berkeley, California*
Kile, Laura LaRhue	*LAS*		*Rockford*
Kimmell, Levett	*Agr*	32	*Chauncey*
Kincaid, Ruth Moore	*HSLAS*	56	*Former City*
Kiner, Howard Dickens	*L*		*Geneseo*
King, Burton Eldred	*Agr*		*Plymouth*
King, DeWitt Leonard	*ME*	83	*Tonica*
King, Edward Herschel	*Bus*	71⅔	*Lincoln*
King, Edward Luther	*Agr (SS)*	59⅙	*Divernon*
King, James Xenophon	*Agr*		*Richmond, Indiana*
King, Vincent Paul	*Agr*		*Indianapolis, Indiana*
King, Vivian	*HSLAS*	70	*Richmond, Indiana*
Kingsley, Wendell Lathrop	*Agr*	32	*Chicago*
Kinney, Edward Clinton	*EE*		*Riverdale*
Kinsey, Alfred Richardson	*Agr*	29	*Centralia*
Kinsey, Jack	*Agr*	26½	*Mackinaw*
Kinsey, Jessie	*HSLAS*	6	*Westfield, Indiana*
Kinzel, Zadah Zimmerman	*LAS*		*Oakland*
Kipp, John George Estill	*EE*	38	*St. Louis, Mo.*
Kirby, Harry Anton	*EE*	37	*Indianapolis, Indiana*
Kirby, Wayne Isaac, B. S., 1914	*LAS*		*Decatur*
Kircher, Armin Martin	*CE*	83	*Chicago*
Kircher, Helmuth Julius	*Agr*	116	*Chicago*
Kirchmer, May Meresa	*HSAgr*		*St. Louis, Missouri*
Kirk, Bertha May	*LAS (SS)*	38	*Decatur*
Kirk, Haddon Spurgeon	*L*		*Belleflower*
Kirk, Heagle James	*LAS*		*Decatur*

Kirkland, Archibald Farley	*A (SS)*	*111*	*Cambridge*
Kirkpatrick, Helen Marie	*HSLAS (SS)*	*33*	*Urbana*
Kirkpatrick, Ross John	*Agr*		*Silvis*
Kirkpatrick, Sidney Dale	*ChE*	*76½*	*Urbana*
Kiser, Helen Mynette	*HSAgr*	*32*	*Champaign*
Kisselburg, Bert Mills	*Agr*	*69*	*Chicago*
Kittermaster, Dougall Anthony	*AE*	*89*	*Glencoe*
Klamt, Robert Herman	*Agr*	*64*	*Chicago*
Klank, Frances Grace	*LAS*	*66*	*Champaign*
Klehm, George Charles, Jr.	*Agr*	*105*	*Arlington Heights*
Klein, Carroll Aaron	*A*	*71*	*Davenport, Iowa*
Klein, George Minnie, A. B., 1914	*SS*		*Urbana*
Klein, Gordon	*Cer*	*2*	*Urbana*
Klein, John Leo	*Bus*		*Omaha, Nebraska*
Klein, Joseph Mathais	*Med*		*Pana*
Klein, Nancie	*LAS*	*19½*	*Urbana*
Kleinbeck, Augustus Gustave	*Ch*		*Litchfield*
Klemme, Vivian Gertrude	*Mus*	*54*	*Dows, Iowa*
Klindworth, Mildred Louise	*LAS*	*39*	*Philo*
Kline, Arthur LaVerne	*Agr*		*Chicago*
Kling, Carl Lawrence	*CerE*		*Dixon*
Klingler, Roland John	*L*		*Lead, South Dakota*
Klink, William Lee	*Bus*		*Cerro Gordo*
Klippel, Gustav Chapin	*ChE*	*51½*	*Urbana*
Klopp, Charles Gorr	*ME*	*75*	*Streator*
Kloppenberg, George Joseph	*A*		*Springfield*
Klotzsche, Bayard Taylor	*Agr*		*Urbana*
Klotzsche, Bessie May	*LAS*		*Urbana*
Klutts, George Madison	*Agr*		*Childress, Texas*
Knapp, Lloyd Dunaway	*CE*	*113*	*Ottawa*
Knapp, Lucia Bradford	*Agr sp*		*Duxbury, Massachusetts*
Knappenberger, Harry Farrar	*A*	*133*	*Macomb*
Knappenberger, John Meredith	*A*	*35½*	*Kansas City, Missouri*
Knemeyer, Edward Franz	*A*	*141½*	*Mason, Nevada*
Knight, Ewart Broughton	*Agr*		*Chicago*
Knight, Francis Putman	*Agr*		*Oklahoma City, Oklahoma*
Knight, Herbert Alfred	*ChE*		*Oak Park*
Knight, John Herbert	*Agr*		*Beardstown*
Knight, Paul Kenneth	*Bus*	*47*	*Wabash, Indiana*
Knobeloch, Thomas Adolph	*Agr*		*Belleville*
Knoche, John Christian	*Agr*	*31*	*Onarga*
Knodle, Cary Lee	*ME*	*96*	*Elgin*
Knoebel, Wilbert George	*A*	*105½*	*Highland*
Knowlton, Elizabeth, A. B., 1914	*Mus*		*Urbana*
Knowlton, Miriam, A. B., 1914	*Mus*		*Urbana*
Knox, Harry Gaylord	*LAS*	*41*	*LaFayette, Indiana*
Knudsen, Niels Alfred	*AE*	*42*	*Urbana*
Kobe, Marshall Eugene	*L*		*Detroit, Michigan*
Kober, Edgar Irving	*A*		*Waterloo, Iowa*
Kobylanski, Joseph Ludwick	*AE*	*112*	*Chicago*
Koch, Charles Edward	*ME*	*109*	*Danville*
Koch, Harvey Charles	*ME*	*133*	*Cloquet, Minnesota*
Koebele, Cornelius Walter	*CE*		*Chicago Heights*
Koehler, Robert A C	*Agr*		*Chicago*
Koepke, Herman Frank August	*CE*		*Chicago*
Kohl, Justin Ferdinand	*Bus*	*31*	*Centralia*
Kohl, Rowena Agnes	*LAS*		*Centralia*
Kohn, John Louis	*Bus*	*29*	*Elgin*
Koier, Grace Amalia	*SS*	*2*	*Chicago*
Kolar, George Franklin	*CE*		*Chicago*
Koll, Henry Michael	*EE*	*101*	*Chicago*
Kohner, William Conrad	*Agr*	*23*	*Waterloo*
Koptik, Bohumil James	*Agr*	*33*	*Chicago*
Korth, Frieda Elizabeth	*LAS*	*68*	*Champaign*
Koupal, Agnes Rose	*HSLAS*	*62*	*Crown Point, Indiana*
Kouyoumjian, Garbaret Hovanes	*EE*	*60*	*Troy, New York*
Kraeckmann, Arthur Endres	*Agr*	*72*	*Chicago*
Kraft, Reynold Rudolph	*MnE*		*Oak Park*
Krane, Leonard Judah	*AE*	*74*	*Chicago*
Kratz, Elwin Valentine. M. S., 1913	*A*		*Champaign*
Kratz, Ethel Gyola, A. B., 1910	*Lb*	*12*	*Champaign*
Kratzenberg, Edwin John, Jr.	*EE*		*Chicago*
Kraucl, Philip Leone	*ME*		*Champaign*
Krauss, Harold Frederick	*Agr*		*Maywood*
KreaSan, Shirley Genevieve	*Mus*	*21*	*Champaign*
Krebs, Wilbur Edward	*L*	*28*	*Belleville*
Kreider, Paul Gates	*LAS*		*Springfield*
Kreidler, Chester Jamison	*LAS*		*Oak Park*
Kreigh, Elie Spencer	*ME*	*74*	*Springfield*
Kreiling, Robert Graham	*Ch*	*28*	*Chicago*
Krieger, William Enoch	*Bus*		*Peoria*
Kriegl, Otto	*ME sp*		*Innsbruck, Austria*
Kriewitz, John Gustav	*Agr*	*32*	*Chicago*
Kritzer, Richard Walter	*Bus*	*70*	*Chicago*

Kroeschell, Roy Sittig	*ME*	*13*	*Winnetka*
Kromer, Carrie Adelaide	*LAS*	*99*	*Elgin*
Krueger, Kurth Carl	*LAS*	½	*La Salle*
Krueger, Otto Arthur	*AE*	*42*	*South Bend, Indiana*
Krug, Louis Gustave	*ChE*	*62*	*Chicago*
Kuhlman, Lloyd	*Agr*		*Beardstown*
Kuhn, Wilfred Henry	*CE*	*107*	*Chicago*
Kuhnen, Proctor George	*CE*	*73*	*Dixon*
Kuhns, John Christian	*EE*	*119*	*Argenta*
Kupper, Walter Jacob	*Agr*	*55*	*Peoria*
Kurt, Leo Peter, Jr.	*RME*	*72*	*Champaign*
Kurtzrock, Edward Valentine	*LAS*		*Dixon*
Kyle, George Lane	*EE*	*110*	*Chicago*
Lacey, John James	*Agr*	*29½*	*Elwood*
Lackey, Kate	*LAS*	*79*	*Lawrenceville*
Lacy, Ralph Wilson	*Bus*		*Knoxville*
Ladd, William Stanton	*Agr*	*53*	*Taylorville*
Ladehoff, Arthur Dellef Henry	*AE*		*Clinton, Iowa*
Lafferty, George Gustavus	*SS*	*36½*	*Galesburg*
Lafferty, John Samuel	*AE*	*96*	*Los Angeles, California*
La Frenz, Grace Etheridge	*LAS*	*96*	*Bushnell*
Lagergren, Gustof Petrus	*A*	*116*	*Morgan Park*
Lagorio, Anthony Powers	*SS*	*85*	*Chicago*
Laing, Walter A	*Agr*	*30*	*River Forest*
Lamb, Hallie Eunice	*LAS*	*30*	*Champaign*
Lamb, John, Jr.	*Agr*		*Worden*
Lambert, Ward Louis	*SS*	*8*	*New York City*
Lambroff, Gregory Vassileff	*EE*	*20*	*Madison*
Lamkins, Lloyd E	*Agr*	*67*	*Urbana*
Lampert, Florian, Jr.	*AE*		*Oshkosh, Wisconsin*
Lanan, Guy	*Agr*		*Kingston*
Lancaster, Ruth Ellen	*LAS*	*64*	*Maywood*
Landon, George	*LAS*		*Chicago*
Landstrom, Adolph Walter	*ChE*	*36½*	*Chicago*
Lane, Jeannette Barry	*SS*		*Buffalo, New York*
Lang, Herman Wellington	*LAS*		*Chicago*
Lang, Le Roy	*LAS*		*Urbana*
Lange, Harry Wilson	*Bus*	*7*	*St. Louis, Missouri*
Langlois, Henry Louis	*SS*	*6*	*Kankakee*
Lanier, Russel D Lyon	*RME*	*103*	*Birmingham, Alabama*
Lanquist, Ada May	*SS*		*Chicago*
Lansche, Oral Albert	*EE*	*79*	*Brighton*
Largent, Jess Charles	*AE*	*76*	*Champaign*
Larson, David Thorsten	*LAS*	*43*	*Elgin*
Larson, Irving Nicholas	*AE*	*75*	*La Porte, Indiana*
Larson, John Carl	*Bus*		*Princeton*
Larson, Lambert Linus	*LAS*		*Mazon*
Larson, Raymond Victor	*Agr*	*60*	*Henderson, Minnesota*
Larson, Walter Nels	*MSE*		*Paxton*
Laskin, Louis James	*A*	*106*	*Chicago*
Lassmann, Meta Irma	*SS*	*8*	*Magnolia*
Lathrop, Carlton Page	*Agr*	*70*	*Chicago*
Lathrop, William Grant	*LAS*		*Sumner*
Latzer, Irma Ada	*HSLAS*	*122*	*Highland*
Laubinger, Roy Norman	*Med*		*Chicago*
Laugman, John Oscar, B. S., 1900	*SS*	*5*	*Newark*
Lauher, Jean Edward	*CE*		*Hot Springs, Arkansas*
Lauphit, Tse	*Agr*		*Shanghai, China*
Lauritzen, Marion Marie	*LAS*		*Chicago Heights*
Lauterbach, Edward George	*Agr (SS)*	*101*	*Bushnell*
Law, Litta Marie	*SS*	*7½*	*Streator*
Lawler, Francis Columbus	*EE*	*37*	*Greenfield*
Lawler, Thomas Joseph	*AE*		*Greenfield*
Lawless, Mary Jane	*LAS*	*66½*	*Carthage*
Lawnin, Nelson	*ME*	*75*	*Edwardsville*
Lawrence, Charles Henry	*Agr*		*Woodstock*
Lawrence, Edgar Alfred	*CE*	*67*	*Chicago*
Lawrence, Ralph E	*A*	*37*	*Ripon, Wisconsin*
Lawrence, Roland Hall	*ME*	*37*	*Chicago*
Lawrence, Roy	*LAS*		*Robinson*
Laws, Joel William	*Agr sp*	*70*	*Donnellson*
Lawson, Everett Eugene	*Agr sp*		*Barry*
Lawson, Mary Maria	*LAS*	*95*	*Sidney*
Lawton, Bradley Cleaver	*LAS*	*90½*	*New York City*
Lawyer, Joseph Dale	*L*	*28*	*Tennessee*
Lax, Louise Catherine	*Mus*		*Springfield*
Leach, Mac E	*LAS*	*63*	*Urbana*
Leach, Paul Jackson	*Agr*	*91½*	*Macomb*
Leatherman, Marian, A. B. (*Cornell Univ.*), 1907	*Lb*	*45*	*Pittsburgh, Pennsylvania*
Leavens, Arthur Bowen	*AE*	*114*	*Kansas City, Missouri*
Ledgerwood, Leroy William	*AE*	*80½*	*Springfield*
Lee, Alfred Chang	*CE (SS)*	*39*	*Changsha, China*

Lee, Arthur	*A*		*Hudson, Wisconsin*
Lee, Charles Yu	*Bus (SS)*	2	*Honan, China*
Lee, Ellena	*HSAgr*	81	*Reynolds*
Lee, Izora	*HSAgr*		*Reynolds*
Lee, Liang	*MnE (SS)*	16	*Hunan, China*
Lee, Tao Nan	*Bus*		*Nanking, China*
Lee, Tsz-Sien	*CE*		*Ho-yon City, China*
Leeming, Tom	*Bus*		*Chicago*
Leete, Lorraine	*LAS*		*Chicago*
Leete, Marion Elaine	*LAS*		*Chicago*
LeeToma, Esther EuMoi	*LAS*		*Honolulu, Hawaii*
Leggitt, Frank	*Agr*	40½	*Urbana*
Leggitt, Fred William	*Agr*	29	*Urbana*
Legrand, Maude Elizabeth	*SS*	7	*East St. Louis*
Lehenbauer, Philip Augustus, Ph.D., 1914	*SS*	20½	*Hannibal, Missouri*
Lehman, Ellery Edmund	*Agr*		*Altamont*
Lehman, Lewis Harry	*CE*	32	*Mattoon*
Lehman, Ruth Townsend	*HSLAS*	34	*Millington*
Lehmann, Gertrude Emma	*HSLAS (SS)*	94	*Berne, Indiana*
Leibsle, Roy Walter	*A*	72	*Des Moines, Iowa*
Leighty, Wayne Snyder	*Agr*	68	*Billett*
Leist, Claude	*LAS*		*Paris*
LeKander, Roy Edward	*CE*	69	*West Chicago*
Lekberg, Carl Helge Samuel	*EE*	108	*Chicago*
Lemmon, Edgar Guy	*LAS*	57	*Roodhouse*
Lemp, John Frederick	*ChE*	58	*Alton*
Lendman, Alfred Nohe	*EE*	37	*Sterling*
Lenhart, Norman Joseph	*Bus*	67	*Mattoon*
Lentz, Clarence Alonzo	*LAS*	64½	*Anna*
Lenz, Andrew Henry	*EE (SS)*	75	*Quincy*
Lenz, Charles Albert	*Med*		*Gilman*
Lenzen, Aloysius Francis	*ChE*	34	*Peru*
Lenzing, Chester William	*Ch*	70	*Chicago*
Leo, Shoo Tze	*Ch*	39½	*Puchi, China*
Leonard, Frank Bonner, Jr., A. B., 1912	*L*	22	*Champaign*
Leonard, Gladys Adeline	*LAS*	97	*Savanna*
Leonard, William Nathan	*Agr*	95	*Anna*
Leopold, Roland Eugene	*L*	56	*Belleville*
Lerch, Edward	*AE*	36½	*Rock Island*
Leslie, Madge Campbell	*LAS*		*Pittsfield*
Lethen, Theodore Hubert	*Bus*	27	*Chicago*
Letman, John S	*LAS sp*		*Sheffield, Jamaica*
Lett, Hamlet Harrison	*Agr*		*Washington, Indiana*
Leverenz, Arthur Charles Gustav	*ME*	103	*Elgin*
Levey, Harold Alvin	*LAS*		*New Orleans, Louisiana*
Levin, Emma	*SS*		*Chicago*
Levitt, Russell	*EE*		*Sailor Springs*
Lewis, Arthur Lee, B.S. *(Ewing Coll.)*	*Agr (SS)*	8	*Benton*
Lewis, Arthur Warfield	*Agr*		*Harrisburg*
Lewis, John Taylor	*AE*	37	*Rockford*
Lewis, Katherine, A.B., 1912	*Lb*		*Chicago*
Lewis, Louise Madolin	*LAS sp (SS)*		*Champaign*
Lewis, Thurlow Girard	*L*	57	*Benton*
Lewis, William Henry	*SS*	38	*Granite City*
Li, Szu Kuang	*Bus*		*Tientsin, China*
Liang, Chuan Ling	*Bus*		*Tai An, China*
Liang, Tu Hung	*Agr*	95½	*Washington, D. C.*
Liang, Yeng Tsung	*Bus*		*Kirin City, China*
Libman, Anna	*LAS*		*Chicago*
Libman, Earl Emanuel	*CerE*	69	*Chicago*
Lichter, Bernard Vincent	*AE (SS)*	38	*Chicago*
Lidster, Homer Edward	*Agr*	38	*Chicago*
Liedel, Russell Brooke	*L*	37	*Springfield*
Liggett, David Carl	*SS*	128	*Camp Point*
Liggett, Irene Lillian	*LAS*	63	*Camp Point*
Light, Curtis Roy	*CE*	107	*Brook, Indiana*
Limerick, Honore Lucile	*SS*	15	*Galatia*
Lin, Thian-Kitt	*Bus*	33½	*Canton, China*
Linbarger, Silas Carl	*CerE*	107	*Champaign*
Lincoln, Clovis Ward	*ME*	110	*Rock Falls*
Lindberg, George Isadore	*ME (SS)*	112	*Princeton, Michigan*
Lindeberg, George Leonard	*A*	37	*Chicago*
Linder, Grace	*HSLAS*	110	*Charleston*
Linder, Sven Cyril	*Cer*	62	*Chicago*
Linderoth, Samuel Joseph	*AE*	40½	*Chicago*
Lindley, Ida Hubbard	*LAS*	94	*Urbana*
Lindmark, Edward Emanuel	*Cer (SS)*	56	*Sycamore*
Lindsay, Hazel May	*SS*	5½	*Oregon*
Lindsay, Horace Willard	*EE*	68	*Rockford*
Lindsay, William Carlyle	*EE*		*Lexington*
Lindsey, Charlie Frank	*Med*	28	*Princeton, Missouri*
Lindsey, George Heath	*EE*	112	*St. Louis, Missouri*
Lindsey, John Royer	*Agr*	33	*Urbana*

Lindsey, Leon Mason	*ME*	*32*	*Onarga*
Lindstrom, Stanley Edwin	*A*	*59*	*Richmond, Indiana*
Lingenfelder, Cleo J	*LAS*		*Altoona, Iowa*
Link, Hilah Jane	*LAS*	*94*	*Champaign*
Linnard, Elmer W	*Agr*	*33*	*Peotone*
Linneen, Henry Wilson	*ME*		*Lake Bluff*
Linnell, Carrie Edna	*LAS*	*52*	*Kellys, North Dakota*
Linsley, Clyde Maurice	*Agr (SS)*	*103½*	*Fairfield*
List, Raymond Lord	*Bus*	*24*	*Belvidere*
Little, Adelbert Dudley	*AE*	*43*	*Genoa*
Little, Allen	*Agr*		*Normal*
Little, Charles Reeves	*Bus*	*69*	*Duluth, Minnesota*
Little, Ethel Esther	*LAS*	*88*	*Champaign*
Littleton, Harry Matthew	*LAS sp*		*Harrison, Arkansas*
Liu, Nai-Yu	*Bus*		*Foochow, China*
Lively, Carlos Alciun	*LAS*		*Oblong*
Livengood, Leslie Parker	*Bus sp (SS)*	*6*	*Danville*
Livergood, Alvah Edmund	*Cer*		*Stonington*
Livesay, Ruth Flagg	*LAS*	*65*	*East St. Louis*
Livingston, Albert	*MnE*		*Rock Island*
Lloyd, Thomas Harold	*Agr*	*99*	*Girard*
Locke, George Ferguson	*Agr*		*La Salle*
Loetterle, Winifred Christine	*SS*	*6½*	*Mt. Pulaski*
Logan, Arthur Charles, Jr.	*Med*	*18*	*Washington, D. C.*
Logan, Frank Allyn	*Bus*	*31*	*Paris*
Logsdon, Joseph Ezra, Jr.	*Agr*	*42*	*Shawneetown*
Lohmann, Lewis Edward	*LAS*		*Pekin*
Loing, Fern Marguerite	*LAS*	*110*	*Belvidere*
Long, John Oras	*LAS*	*70*	*Watseka*
Long, Leonard Franklin	*ChE*		*Tonica*
Long, Ruth Ida	*LAS*		*Watseka*
Longueville, Joseph Charles	*LAS (SS)*	*121½*	*Dubuque, Iowa*
Loomis, Arthur Tull	*Agr*	*106*	*Dallas City*
Loos, Alfred John	*SS*		*Greenwood, Wisconsin*
Lopez, Camilo Rafael	*A*		*Chicago*
Lotz, Harold Benjamin	*AE*	*75½*	*Madison, Indiana*
Love, Beryl Franklin	*LAS*		*Danville*
Love, Clifford Sharon	*Agr*	*66*	*Sidney*
Love, Harry Halme	*LAS*		*Newton*
Love, Mary Elizabeth	*LAS*	*41*	*Urbana*
Lovell, M McDonald	*A*	*38*	*Chicago*
Lovewell, Gladys	*LAS*		*Chicago*
Low, Apan Paul, A.B. *(Stanford Univ.)* 1914	*AE*		*Honolulu*
Lowe, Ethelbert Coke	*L*	*16*	*Robinson*
Lowe, Wayne Marsh	*ChE*		*Chicago*
Lowman, Charles Elliott	*Agr*	*60*	*Lanark*
Lowry, Bessie	*LAS*	*33*	*Lead, South Dakota*
Lu, Chi Tsing	*MnE (SS)*	*74*	*Kanchow, China*
Lucy, Bennie Hebron	*Agr*		*Helena, Arkansas*
Ludlow, Helen	*LAS*		*Paxton*
Ludvik, Benjamin Edward	*LAS*	*65*	*Chicago*
Ludwig, Ethel Lenore	*HSLAS*	*32*	*St. Louis, Missouri*
Ludwig, Lester John	*Bus*	*67*	*Ottawa*
Lueder, Roy Moore	*AE*	*37*	*Cherokee, Iowa*
Lumley, Harold McLean	*Agr*	*67½*	*Urbana*
Lumley, Leslie Robert	*Agr*	*68*	*Urbana*
Lummis, Irwin Lytle	*ME*	*37*	*Quincy*
Lummis, Merle Francis	*LAS*	*75*	*Quincy*
Lund, John Virtus	*CE*	*70*	*Elgin*
Lundberg, Bruce Gurler	*Agr*	*20*	*De Kalb*
Lundberg, Henry Gurler	*Agr*		*De Kalb*
Lunde, George Richard	*Agr*	*66*	*Elgin*
Lundeen, Curt Carl	*AE*	*37*	*Rock Island*
Lundgren, Andrew Victor Theodor	*AE*	*94*	*Edgar, Nebraska*
Lundgren, Floyd Edward	*EE*		*Lostant*
Lundgren, Frederick Gunard	*ME*	*110½*	*Chicago*
Lundin, Roy Simeon	*Agr*	*107*	*Chicago*
Luney, Ray Timothy	*L*	*57*	*De Kalb*
Lungren, Arthur Nathaniel	*ME*	*37½*	*Aurora*
Lungren, Edgar Emmanuel	*ChE*	*94*	*Aurora*
Lurie, Sidney Joseph	*EE*	*44*	*Chicago*
Lusk, Genevieve Aron	*HSAgr*	*33*	*Quincy*
Lutes, Gifford W	*A*		*Lutesville, Missouri*
Lutz, Robert Stookey	*EE*	*110*	*Decatur*
Lyman, Lewis Thornton	*Agr*	*87*	*Kapoho, Hawaii*
Lyman, Mary Agnes Adelaide	*LAS*		*Champaign*
Lyman, Richard Dana	*Agr*	*154*	*Chicago*
Lyman, William Elias	*SS*		*Des Moines, Iowa*
Lynch, Margaret	*HSLAS*		*Urbana*
Lynch, Virginia Esther	*LAS*		*Rockford*
Lynn, John Robert	*A*	*63*	*Greensburg, Indiana*
Lyon, John Boyd	*Cer*	*70*	*La Harpe*
Lyon, William Ranft	*LAS*		*Riverside*

Lyons, Bernard Marion	*LAS*		*Pontiac*
Lyons, Carrie Fay	*HSLAS*	*69*	*Urbana*
Lyons, Hazel Sibyl	*HSLAS*	*69*	*Urbana*
Lyons, Oscar Ivan	*ME*		*Hoopeston*
McAdams, May Elizabeth	*Agr sp*	*66*	*Chicago*
McAfee, Leo Gay	*Bus*	*72*	*Springfield*
McAllister, Ivorine	*LAS*	*10*	*St. Louis, Missouri*
McArdle, Montrose Pallen	*A*	*25*	*St. Louis, Missouri*
McAndrew, William	*SS*	*8*	*Vincennes, Indiana*
McBride, Charles Bernard	*CE*	*33*	*Perryville*
McBride, Ralph	*AE*	*30*	*Monmouth*
McBride, Wesley Ray	*Agr*		*Elgin*
McCabe, Lester Thomas	*Agr*	*29*	*Ransom*
McCall, Alice Ruth	*LAS*		*Kenosha, Wisconsin*
McCall, Sallie Jennie	*SS sp*		*Decatur*
McCammon, Martha	*LAS*		*Urbana*
McCandlish, Fred Raymond	*Agr*		*Toledo*
McCarroll, James Shipp	*Agr*		*Owensboro, Kentucky*
McCart, John Lee	*CE*	*5*	*Fort Worth, Texas*
McCarthy, Frank William	*LAS*	*62*	*Washington, D. C.*
McCartney, Ward Bishop	*ME*		*Elkhart, Indiana*
McCaskill, Lyman Clauson	*Agr*		*Taylorville*
McCaughey, William Martin	*Bus*	*33*	*Chicago*
McCauley, Charles Hartman	*A*	*116*	*Chicago*
McClellan, Kenneth Butler	*Agr*	*41*	*Chicago*
McClelland, Charles Benjamin	*SS*	*13½*	*Venice*
McClelland, Miles John	*A*	*68½*	*Boise, Idaho*
McClenkin, Justus Logan	*Agr*		*Morning Sun, Iowa*
McCloud, James Forsyth	*Bus*	*35*	*Sheldon*
McClugage, Harry Bruce	*LAS (SS)*	*100*	*Peoria*
McClure, Adelle Elizabeth	*Mus*	*21*	*Atlanta*
McClure, Winifred Leo	*HSLAS*	*82*	*Chrisman*
McClurkin, Justus Logan	*Agr*		*Morning Sun, Iowa*
McColley, Carrie Lucile	*HSLAS*	*96*	*Shelbyville*
McConn, Prudence Emily Pratt, A.B. *(Univ. of Minn.)* 1905	*SS*		*Urbana*
McConnel, Marian	*HSLAS*		*Danville*
McConnell, Marvin Greer	*Bus*	*16*	*Chicago*
McConoughey, Aden Davies	*SS*	*5*	*Chicago*
McCord, Fitch Landis	*Agr*		*Paris*
McCormack, Joseph Hume	*ChE*	*85*	*La Salle*
McCormack, Thomas Hume	*CerE*		*La Salle*
McCown, Thomas James	*EE*	*2*	*Huntsville, Alabama*
McCoy, Alva Elisha	*Agr*	*68*	*Altamont*
McCoy, Homer Walter	*Agr*	*36*	*Mt. Sterling*
McCoy, J Harvey	*Agr sp*		*New York City*
McCracken, Wendell Kemp	*Bus*	*66*	*Paxton*
McCubbin, Sallie Logan	*SS*		*Petersburg*
McCuen, Glenn William	*Agr*	*110*	*Chebanse*
McCulloch, Harry Weber	*SS*	*131½*	*Freeport*
McCullough, Clarence Avery	*LAS*	*48*	*Urbana*
McCullough, Helen E	*HSLAS*	*48*	*Urbana*
McCullough, Mary Elizabeth	*LAS*		*Urbana*
McCumber, Charles William	*AE*	*86½*	*Chicago*
McDermott, Raymond Adam	*Med (SS)*	*31*	*Batavia*
MacDonald, Ada Lucille	*Mus sp*		*Lincoln*
Macdonald, Alexander Paul, Jr.	*Agr*	*68*	*Morris*
McDonald, Grace	*SS*	*4*	*Marion*
McDougle, Grace Almira	*HSAgr*		*Humboldt*
McDowell, Robert E	*Agr (SS)*	*7½*	*Rocky Mount, North Carolina*
McEldowney, Roy	*ME*	*4*	*Chicago*
McElhiney, Ruth	*LAS*		*Kenney*
McElroy, Mildred Cherington B.A. *(Ohio Wesleyan)* 1914	*Lb*		*Delaware, Ohio*
McElveen, William Thomas, Jr.	*Bus*	*64*	*Evanston*
McEvers, Ernest	*EE*		*Montezuma*
McEvoy, Thomas Treston	*Agr*	*32*	*Chicago*
McFadden, Belle Lorraine, A.B., 1897	*SS*		*Champaign*
McFall, Dumas Miller	*LAS*	*67*	*Mattoon*
McFarland, Robert Bruce	*A*	*84*	*Topeka, Kansas*
McFerson, William H	*AE*	*59½*	*Boulder, Colorado*
McFie, Amelia May	*HSLAS*		*Santa Fe, New Mexico*
McGaffigan, Emma F	*SS*	*5½*	*Carlyle*
McGaughey, Guy Ennis	*L*		*Lawrenceville*
McGehee, Hester Elizabeth	*SS*		*Urbana*
McGehee, Seelye Wright	*Med*	*28*	*Urbana*
McGhee, Ora	*Agr*	*88½*	*Norris City*
MacGillivray, Malcolm Edwards	*LAS*		*Urbana*
McGinnis, Charles Allen	*SS*	*12½*	*Reevesville*
McGowan, Thomas Fenton	*L*		*Decatur*
McGrath, Floyd Lawrence	*Med*	*30*	*Savanna*
McGrath, Wilson Thomas	*Agr*		*Chicago*
McGraw, Katherine Cecilia	*Mus sp*		*Champaign*

McGraw, Katherine Leslie, A.B., 1914	*Lb*		*Urbana*
McGraw, Thomas Francis	*Bus*		*Champaign*
McGregor, John Lancaster	*CE*		*Chicago*
McGuinness, Hugh Stanley	*Med*	*36*	*Chicago*
MacInnes, Frances Jean	*Agr*	*67*	*Urbana*
McIntire, Ella Elliott, B.L.S., 1909	*SS*		*Urbana*
McIntire, Virlon Willard	*SS*	*7½*	*Potomac*
McJohnston, Claude Allen	*SS*	*5*	*Evanston*
MacJohnston, Mary Jarvis	*SS*	*1½*	*Evansville, Indiana*
McKale, James Fred	*SS*	*8*	*Lansing, Michigan*
McKean, Leonard Albert	*SS*	*61*	*Woodson*
MacKechnie, Harry Woodington	*AE*	*61*	*Brooklyn, New York*
McKee, Edna Belle	*LAS*	*100*	*Kankakee*
McKeever, Emmett Robert	*EE*		*Jackson, Nebraska*
McKeon, Joseph Moore	*MSE*	*93*	*Buffalo, New York*
McKeown, John Latimer	*AE*	*11¼*	*Chicago*
McKenzie, Annie Laurie	*SS*		*Highland Park*
McKinnell, Isabelle Georgia	*SS*	*55½*	*Beardstown*
McKinney, Normann	*Agr*	*3¼*	*Chicago*
McKnight, John Ira	*MnE*		*Chicago*
McKnight, Timothy Irle	*L*	*23*	*Oblong*
McKown, Russell L	*Agr*	*36*	*Davenport, Iowa*
McLane, Erwin Roscoe	*Agr sp*		*Reddick*
McLaughlin, Mayme	*SS*		*Auburn*
McLaughlin, Walter Wylie	*Agr sp*	*31*	*Cartter*
McLee, Edward Brown	*AE*		*Rockford*
McManus, James Bernard	*SS*	*33*	*La Salle*
McMillan, John Charles	*SS*	*7½*	*Aledo*
MacMillan, Lawrence Claude	*EE*	*60*	*Bridgeport*
McMillen, George Burr	*Bus*	*102*	*Champaign*
McNally, John Leo	*LAS*	*75½*	*Pueblo, Colorado*
McNally, Mary Cecilia	*LAS*		*Pueblo, Colorado*
McNamara, James Leslie	*LAS*		*Rock Island*
MacNelly, William A	*AE*	*29*	*Indianapolis, Indiana*
McNish, David Thornley	*Agr*		*Crystal Lake*
McNulta, Scott	*LAS*	*33*	*Decatur*
MacPherson, Earle Steele	*ME*	*11½*	*Highland Park*
McRobie, Douglas	*LAS*	*58*	*Montclair, New Jersey*
McTaggart, Marguerite	*SS*		*Divernon*
McVey, Nellie Frances	*LAS (SS)*	*98½*	*Hill City, Kansas*
McWilliams, Marie Lindsay	*Mus*		*Urbana*
Macauley, John Blair, Jr.	*ME*		*Evanston*
Macbeth, Grace	*Mus*	*121*	*Villa Grove*
Mace, Hugh Harrison	*LAS*		*Belleville*
Macfarlane, Menzie	*Agr sp*		*Salt Lake City, Utah*
Machovec, Edward Paul	*ME*	*50*	*Kansas City, Missouri*
Mackey, Nicholas Charles	*AE*		*Sydney, Australia*
Mackie, Elton Thomas	*Agr*	*29½*	*New Orleans, Louisiana*
Maclear, John Fulton, A.M. *(Univ. of Chicago)* 1902	*SS*		*Chicago*
Macomber, Frank Bartlett	*Bus*	*29*	*Oak Park*
Madden, Grace Erminie	*LAS (SS)*	*72½*	*Champaign*
Madden, Helen Louise	*Mus (SS)*	*100½*	*Champaign*
Madden, Katherine Josephine	*LAS*		*Champaign*
Maddock, Earl Chester	*Agr*		*St. Joseph*
Mader, August	*AE*	*116*	*Farmer City*
Madsen, Olav	*AE*	*37*	*Litchfield, Minnesota*
Maguire, Mary Josephine	*SS*	*3*	*Alton*
Mah, Wing Ngui	*LAS sp*	*32*	*San Francisco, California*
Maher, Chauncey Carter	*Med*		*Payson*
Maher, Lillian Elizabeth	*SS*	*10*	*Champaign*
Mahood, Harry Samuel	*CE*	*75*	*Mt. Carroll*
Mains, Grace Lillian	*HSLAS*		*Valparaiso, Indiana*
Maitra, Krishna Mohan	*RME*	*39*	*Benares City, India*
Maley, Robert Carleton	*ME*	*108*	*Rochelle*
Malganee, Abdullah	*ME*		*Sokar, India*
Mallett, Norman James	*CerE*	*41*	*Altoona, Pennsylvania*
Mallory, Richard Henderson	*Med*		*Batavia*
Mallstrom, Roe Eugene	*Bus*	*2*	*Harvey*
Maloit, Pauline Germaine	*LAS*	*61*	*Elmhurst*
Malsbary, Grace Estella	*LAS*		*Darlington, Indiana*
Mandeville, William Howard	*Agr*	*33*	*Winnebago*
Manley, Marion	*A*		*Junction City, Kansas*
Manley, Myra Frances	*LAS*		*Champaign*
Manley, Otis Rowe	*Bus*	*35*	*Harvard*
Mann, Edna Francis	*HSLAS*	*31*	*Oak Park*
Mann, Harold Abraham	*Agr*	*38½*	*Mannville, Florida*
Mannix, Pauline Marie Elizabeth	*SS*	*33*	*Rockford*
Mansfield, Charles Fredric	*Agr*	*54*	*Monticello*
Mapel, Frances Pauline	*HSAgr*	*32*	*Fairbury*
Mapes, George Chandler	*ME*	*59*	*Savannah, Georgia*
Marbach, Henry Adam Lewis	*CE*	*104½*	*Chicago*
Marblestone, Rose	*Mus*	*17*	*Chicago*
Marbold, Margaret Ann	*LAS*	*92*	*Greenview*

Marbold, Pauline	*LAS*	*45*	*Greenview*
Marks, Hazel Frances	*LAS*	*63*	*Plymouth, Indiana*
Marks, Maude Irene	*LAS*	*33*	*Plymouth, Indiana*
Marks, Sarah Ann	*LAS (SS)*	*123*	*Pecatonica*
Markwardt, Henry William	*CE*	*37*	*Elgin*
Marquis, Faughn Lewis	*LAS*		*Mt. Vernon*
Marquis, Leo Daniel	*A*	*107*	*Milford*
Marsh, J S	*Agr*	*21*	*Saunemin*
Marshall, Glenn Wylie	*MnE*		*Rutland*
Marshall, Ralph William	*LAS*	*89*	*West Chicago*
Marshall, Robert Denkmann	*Bus*	*5*	*Rock Island*
Marshall, Thomas Holland	*LAS*		*Fairfield*
Marshall, William Vincent III	*Agr*		*Milford*
Marston, Ava	*HSAgr*	*15*	*McGerr*
Martell, Edmund Anthony	*EE*		*Murphysboro*
Martens, Margaret Louise	*HSLAS*		*Anchor*
Martin, Albert Thaddeus	*Agr*	*21*	*Newton*
Martin, Charles Blake	*Bus*		*Mt. Carmel*
Martin, Charles Donovan	*Bus*		*Rantoul*
Martin, Dwight Ray	*Agr*	*29*	*Mason City*
Martin, Emmet Giles	*A*	*23*	*Los Angeles, California*
Martin, Esther Evelyn	*SS*	*14*	*Bridgeport*
Martin, Fay Waldo	*Bus*	*64*	*Mt. Carmel*
Martin, Frank Albert	*ChE*		*Chicago*
Martin, Harold Montgomery	*A*	*32*	*Cairo*
Martin, Marvel	*LAS*		*Ft. Meyers, Florida*
Martin, Milford Maurice	*LAS*		*Murphysboro*
Martin, Thomas William	*Agr*		*Fairfield*
Martin, William Holmes	*LAS*	*94½*	*Greenville, Ohio*
Martin, William Hugh	*LAS*		*Beech Ridge*
Martin, William Troy	*Agr*		*Climax, Arkansas*
Marx, Arthur William Kuhs	*ME*	*10*	*St. Louis, Missouri*
Marx, Frederick August Kuhs	*CE*	*108¼*	*St. Louis, Missouri*
Marx, George Bernard	*Bus*	*40*	*Aurora*
Mason, Arthur Helgeson	*Bus*	*64*	*Urbana*
Mason, Jean Fraser	*LAS*		*La Salle*
Mason, Ross Seguine	*ME*	*75*	*Buda*
Massey, Henry Laurens	*ME*		*Little Rock, Arkansas*
Masson, Lewis William	*Agr*		*Buffalo, New York*
Masuda, Tetsu, A.B. *(Univ. of Iowa)* 1913	*Agr*	*61½*	*Takancaton City, Japan*
Mateer, Howard Wilson	*EE*	*74*	*Rutland*
Mather, Asa Frisbie	*LAS*		*Plainfield*
Mather, Rose Margaret, A.B., 1905	*Lb*	*53*	*Plainfield*
Mather, William Asher	*Agr*	*27*	*Aurora*
Mathews, William Rankin	*Bus*	*43½*	*Pasadena, California*
Mathieson, Martin	*LAS sp*		*Konsmo, Norway*
Mathis, George Newton	*Agr*		*Magnolia*
Matlock, Gerald Eugene	*Agr*		*Yorkville*
Matoba, George Hajime	*EE*	*64*	*Kioto, Japan*
Matson, Harry Emil	*ME*		*Chicago*
Matteson, Glenn Harlow	*Agr*	*98½*	*Fairfield*
Matthews, Albert Otto	*MSE*		*Washington, D. C.*
Matthews, Allen Bradford	*Bus*		*West Lafayette, Indiana*
Matthews, Grover Cleveland	*LAS*		*Colchester*
Matthews, Irene Estella	*SS*		*Dubuque, Iowa*
Mattingly, Leo Joseph	*AE*	*76*	*Champaign*
Mattis, Mary Katherine, A.B. *(Smith Coll.)* 1911	*LAS*		*Champaign*
Mattison, John Dwight	*CE*	*108*	*Oregon*
Mattoon, Edwin Whitaker	*LAS*	*111*	*Champaign*
Matuszewig, Veronica Catherine	*LAS*		*Minonk*
Mautner, Erwin William	*ChE*		*Chicago*
Mavity, Maurine	*LAS*	*60*	*Eureka*
Mavor, Hugh Nelson	*AE*	*73*	*La Grange*
Maxfield, Elizabeth Allmond	*SS*	*6*	*Palmyra*
Maxwell, Leslie Blaine	*Bus*	*37*	*Paris*
Maxwell, Loyal C	*ChE*	*32*	*Flat Rock*
Maxwell, Raymond Jones	*LAS*		*Paris*
May, Clifford Blaine	*Agr*	*48*	*Kirkland*
Mayerstein, Ralph Maurice	*LAS*	*30*	*Lafayette, Indiana*
Maynard, Donald Edmund	*Med*	*31*	*Chicago*
Mayo, Thomas Bolton	*LAS*		*Alton*
Maze, Hamilton Murray	*LAS*	*34*	*Peru*
Mealiff, Arthur Edward	*Agr*	*65*	*Chicago*
Meals, Robert Woodruff	*Agr*	*29*	*Peoria*
Medendorp, Titus Arend	*ME*	*4*	*Chicago*
Meek, Harold Tecumseh	*LAS*		*Peoria*
Meek, Wilbur	*Bus*	*56*	*Corrollton*
Meeker, Grace Ruth	*SS*		*Ottawa, Kansas*
Meeker, Jennie Evelyne	*SS*		*Ottawa, Kansas*
Mehlhop, Margaret Mildred	*LAS (SS)*	*88*	*Havana*
Meisenhelder, Benjamin	*LAS*	*54*	*Palestine*
Melin Charles Raymond	*Agr*		*Chicago*

Melnick, Louis I	*Med(SS)*	*13*	*Burlington, Vermont*
Meltz, Nathan	*Agr (SS)*	*105*	*Hamburg, Germany*
Memmen, Dean Ellsworth	*CE*		*Minonk*
Mendel, Ferdinand Albert	*ME*		*Chicago*
Meneley, Olive Myrtle	*Mus*	*68*	*Champaign*
Menzel, George Henry	*Ch*	*108½*	*Moline*
Menig, Alma Agnes, A.B. *(Univ. of Colorado)* 1908	*Lb*		*Denver, Colorado*
Menke, Arnold Edward	*LAS (SS)*	*94*	*Evansville, Indiana*
Menke, Harry George	*MSE*	*108*	*Quincy*
Mensenkamp, Louis Edward	*LAS*	*70*	*Freeport*
Menz, Olive Mae	*Mus*		*Rochelle*
Mercer, Charles Franklin	*CE*		*Kansas City, Missouri*
Mercer, George Eugene	*Agr sp*		*Wyanet*
Mercer, Ralph Dilworth	*Agr*		*Vermont*
Mercey, Raymond John	*Med*	*64*	*St. David*
Meredith, La Verne	*SS*	*21*	*Perry*
Merker, David Felmley	*Agr*		*Belleville*
Merrel, H Dayton	*SS*		*Kokomo, Indiana*
Merrick, Ada Menona	*SS*	*12*	*Champaign*
Merrick, Ida Leona	*SS*	*12*	*Champaign*
Merrill, George Wilson	*Agr sp*	*37*	*Le Roy, Kansas*
Merriman, John Riley	*SS*	*125½*	*Springfield*
Merritt, Cora Leone	*HSLAS*	*31*	*St. Louis, Missouri*
Metz, Carl Altgeld	*CE*	*110*	*Tolono*
Metzger, Leroy Paul	*Bus*		*Cairo*
Metzler, Arthur Maurice	*Bus (SS)*	*82*	*Champaign*
Mewhirter, Jannet Lou	*HSAgr*		*Yorkville*
Meyer, Alfred Werner	*ChE (SS)*	*35*	*Chicago*
Meyer, Alvin Frederic	*Agr*	*26*	*Deerfield*
Meyer, Carl Theodor	*A*	*67*	*Springfield*
Meyer, Ralph	*LAS*	*27*	*Flora*
Meyer, Raymond Edward	*Bus*	*17*	*Chicago*
Miao, Yun Tai	*ME*		*Yunnanfu, China*
Miao, Lu-drao	*CE*		*Washington, D. C.*
Mickelson, Jens Christian	*EE*	*46*	*Chicago*
Middleton, Edith Anna	*HSLAS*	*39*	*Chicago*
Midkiff, John Howard	*Agr*	*41*	*Stonington*
Miers, Roy Hamilton	*Agr*	*71*	*Burney, Indiana*
Miles, Eunice	*HSLAS*		*Garden City, Kansas*
Miles, Helen Myriel	*LAS*		*Bushnell*
Miles, Luther Fiske	*Agr*		*Urbana*
Miles, May	*HSAgr*	*68*	*Garden City, Kansas*
Miles, Thomas Boyd	*Agr*	*19*	*Lewistown*
Millar, Russell Ward	*Ch*	*75*	*Mattoon*
Miller, Anna	*SS*		*Petersburg*
Miller, Mrs. Anna Easley	*SS*		*Indianapolis, Indiana*
Miller, Archie Roscoe	*EE*		*Mahomet*
Miller, Arthur Clair	*SS*		*New Market, Indiana*
Miller, Cuyler Clark, Jr.	*Agr*		*Carlinville*
Miller, Daniel Edwin	*ME*	*82*	*Quincy*
Miller, Dean Albert	*ME*		*Canton*
Miller, Elliott Strong	*Bus*	*60*	*Oak Park*
Miller, Erwin Franklin	*A*	*81½*	*Onarga, Kansas*
Miller, Everett Dodge	*ME*		*Bushnell*
Miller, Francis H	*Bus*		*Chicago*
Miller, Fred Merle, B.S. *(Oregon Agr. Coll.)* 1914	*ME*		*Albany, Oregon*
Miller, Fred Raney	*LAS*	*63*	*Gilman*
Miller, Harold Thomas	*ChE*		*Burlington, Iowa*
Miller, John Harold	*EE*	*110*	*Oak Park*
Miller, Joseph Harrison	*CE*	*74*	*Red Oak*
Miller, John Millage	*SS*	*25*	*Evansville, Indiana*
Miller, Kathleen Winifred	*LAS*		*Princeville*
Miller, Kenneth Adlai	*A*	*29*	*Bloomington*
Miller, Mabel Lucile, A.B., 1912	*SS*		*Urbana*
Miller, Max F	*Agr*		*Waterloo, Iowa*
Miller, Ora Lucile	*HSLAS*	*116*	*Atlanta*
Miller, Pearl Hobart	*SS*	*8*	*Marshall*
Miller, Perrin Cromwell	*LAS*		*Wheaton*
Miller, Samuel Adam	*Agr*		*Pawpaw*
Miller, William Pitt, A.B., 1901	*Agr*	*59*	*Bloomington*
Milleson, Cecil Clyde	*Agr*	*34*	*East St. Louis*
Millikan, Carl E	*MnE*		*Chicago*
Millizen, Edna Varner	*LAS (SS)*	*110½*	*Champaign*
Millman, Harry Abram	*Bus*		*Chicago*
Mills, Ben Fay	*Agr*		*Palestine*
Mills, Buren Orville	*Agr*	*30*	*Palestine*
Mills, Elmer Elias	*ChE*	*41*	*Chicago*
Mills, Fred Leon	*L*	*3*	*Oak Park*
Mills, Glenn Horace	*LAS*		*Ottawa*
Mills, James Evan	*SS*	*3*	*Waterloo, New York*
Mills, John Turner	*Agr*	*71*	*McNabb*

Mills, Niles Easton	*Agr*		*San Luis Obispo, California*
Millsom, Walter Clair	*Cer*	12¼	*Macomb*
Milne, Agnes Mabel	*HSLAS*	101	*Lockport*
Milne, Edward Lawrence, M.S., 1900	*SS*	2	*Lockport*
Miner, Helen Nellora	*HSAgr*		*Adair*
Miner, Henry	*Agr sp*	67½	*Waverly*
Miner, William	*SS*	80	*Cambria, Iowa*
Mink, Dwight L	*EE*	37	*Galva*
Minkema, William Herman	*ME*	37	*Chicago*
Minnis, Lemuel Ernest	*Agr*	69	*Chicago*
Missimer, Dale Johnson	*SS*	15	*Colorado Springs, Colorado*
Mitchell, Daniel Palmer	*SS*	6	*Effingham*
Mitchell, Donald Richards	*Agr*		*Chicago*
Mitchell, Elsie Louise	*HSAgr*	82	*Havana*
Mitchell, Eva, A.B., 1912	*SS*		*Georgetown, Ohio*
Mitchell, George William	*Agr*	34	*Marion*
Mitchell, Grace	*LAS*	65	*Georgetown, Ohio*
Mitchell, Grover Ira	*ME*	121½	*Cornell*
Mitchell, Helen, A.B., 1914	*SS*		*Georgetown, Ohio*
Mitchell, Leonard Osgood	*Agr*	38	*Chicago*
Mitchell, Robert Stephens	*EE*		*St. Louis, Missouri*
Mitchell, Leroy James	*Agr*		*Robinson*
Mitchell, William Norman	*CE*		*Topeka, Kansas*
Moberly, Edwin Stuart	*Bus*		*Tallulah, Louisiana*
Moburg, Ernest Reuben	*Agr*		*Kirkwood*
Modes, Sara Voorhees	*SS*	7½	*Decatur*
Moffett, Clyde Grant	*SS*	3½	*Murrayville*
Moffett, Donald Romain	*L*	33	*Paxton*
Moffett, Thomas Oscar	*EE*	37	*Oakland*
Mohlman, Harry	*Agr*	63	*Urbana*
Mohr, Alba Agnes	*SS*	110	*Beardstown*
Mohr, Edward Emil	*Med*		*Chicago*
Mohr, John Henry	*Bus*	25	*Chicago*
Moll. Paul	*Bus*		*St. Louis, Missouri*
Molyneaux, Juniata Onita	*LAS*	31	*Woodland*
Moncrieff, James Weir	*CerE*		*Otsego, Michigan*
Monnig, Joseph Theodore	*Bus*		*St. Louis, Missouri*
Monohon, Ila E	*HSLAS*		*Greenup*
Montague, Albert Richardson	*CE (SS)*	93	*Chicago*
Montgomery, Charles Albin	*Bus*		*Petersburg*
Montgomery, Earl Livingston	*Agr*	26½	*Chicago*
Montgomery. Thaddeus Lemert	*Med*	41	*Dexter, Missouri*
Moon, Lawrence Bartelle	*ME*	30	*Auburn*
Mooney, Raymond	*EE*	80	*Chicago*
Moor, Hubert Watson	*ChE*	35	*Champaign*
Moore, Allen Ray	*LAS*		*Urbana*
Moore, Allie Adelaide	*LAS*		*Urbana*
Moore, Edward Wilson	*Med*		*Murphysboro*
Moore, Herbert Jackson	*Agr*	102½	*Chicago*
Moore, Hiram Wodrich	*Agr*		*Chicago*
Moore, Lewis Albert	*Agr*	50	*Humboldt*
Moore, Mabel Elizabeth	*HSLAS*	30	*Nashville*
Moore, Mary Rebecca, A.B., 1911	*Mus*		*Tolono*
Moore, Nathaniel Francis	*Agr sp*		*Chicago*
Moore, Nelle	*Mus (SS)*	3	*Olney*
Moore, Richard Jacob	*Agr*	53½	*Griggsville*
Moore, Sara Elizabeth	*LAS*		*Danville*
Moore, Sidney Samuel	*SS*	17	*Galva*
Moore, Wellington, Edward	*LAS*		*Schenectady, New York*
Moore, William Abner	*LAS (SS)*	81	*Urbana*
Moote, Truman Pharaoh	*CE sp*		*Urbana*
Moran, Katharine Mary	*Agr sp*	30	*Bartlesville, Oklahoma*
Morey, Clara Adah	*LAS*		*Macomb*
Morey, Sarah Jane	*HSLAS*		*Macomb*
Morgan, Chester Arthur	*MnE (SS)*	110	*Virden*
Morgan, John William	*SS*	12¼	*Braceville*
Morgan, May Merboth	*LAS*	34½	*Chicago*
Morgan, Ralph Waldo	*ChE*	69	*Macomb*
Morgan, Thomas Sherman	*LAS*	71	*East St. Louis*
Morin, Oswell	*Med*	26	*Danville*
Morita, Hanyemon	*Bus*		*Kimitsa, Japan*
Morkel, William Algernon Kingsmill	*Agr*	148½	*Belleville, South Africa*
Morrell, Ralph Leonard	*CE*	118	*Chicago*
Morrill, Leslie Sherman	*ME*	75	*Blue Island*
Morris, Harold Harrison	*Agr*		*Clinton*
Morris, Helen Elisabeth	*HSLAS*		*St. Louis, Missouri*
Morris, Josephine Annette	*SS*	11	*Murphysboro*
Morris, Nelson Marvin	*MnE*	36	*Harrisburg*
Morris, Vernon Leslie	*AE (SS)*	102	*Congress Park*
Morrison, Carl Raymond	*ME*	12	*Columbus, Indiana*
Morrison, Carlisle Brey	*L sp*		*Waterloo*
Morrison, Harry	*Agr*		*Des Moines, Iowa*
Morrison, Helen Sinclair	*HSAgr*	103	*Joliet*

Morrison, Ivan G	*Agr*	*32*	*Fairbury*
Morrison, Lethe Eleanora	*HSLAS*		*Waterloo*
Morrison, William Raymond	*LAS (SS)*	*109½*	*Waterloo*
Morrissey, Edward Henry	*LAS (SS)*	*103*	*Champaign*
Morrow, Erwin Geoby	*A*		*Zimmerman, Louisiana*
Morsch, Elmer John	*Agr*		*Hinckley*
Morse, John Hamilton	*Bus*	*115*	*Troy, Pa.*
Morton, Eula Gertrude	*LAS*		*Marshall*
Morton, Ray Victor	*Agr*		*Paris*
Moser, Olga Fern, B. Mus., 1913	*LAS*		*Sigel*
Moses, Robert Louis	*Agr*	*67*	*Chicago*
Mosier, Leota Irene	*HSLAS*	*67*	*Urbana*
Moss, Alida Helen	*LAS*		*Urbana*
Moss, Florence Louise	*LAS*	*40*	*Charles City, Iowa*
Moss, C. Sedgwick	*A*	*65*	*Charles City, Iowa*
Moss, Gladys Irene	*HSLAS*	*99*	*Chicago*
Moss, Mrs. Lillie C	*SS*	*6½*	*Chicago*
Moss, Ruth Alice	*SS*	*75½*	*Mt. Vernon*
Mottier, Julia Louise	*HSLAS*	*64*	*Gibson City*
Moulton, Harold Hoyt	*Agr sp*		*Urbana*
Mounts, Will Walter	*Agr*	*75*	*Carlinville*
Mourning, Paul Wetzel	*L*	*28*	*Rushville*
Moyen, Carl Peter	*ChE*	*59*	*Chicago*
Muckelroy, Renzo	*SS*	*116½*	*Mt. Vernon*
Mueller, Alphose John	*A*		*Granite City*
Mueller, Carl Oscar	*AE*	*37*	*Chicago*
Mueller, Fred August	*Agr*		*Milford*
Mueller, Fritz August	*ChE*		*Fremont, Nebraska*
Mueller, Harry Louis	*Ch*	*66*	*Highland*
Mueller, Henry Rollo	*Agr sp*	*114*	*Sedgwick, Kansas*
Mueller, Herbert Edward	*AE*	*37*	*Chicago*
Mueller, Herbert Zoller	*EE*	*74*	*Quincy*
Mulac, Louis Edward	*ME*	*82*	*Chicago*
Mulford, Edgar Theodore	*CE*	*27*	*Mason City*
Mullins, Edward Richard	*AE*	*47*	*Champaign*
Munns, Charles Willard	*Bus*		*Peoria*
Munroe, Mary Flora	*LAS*		*River Forest*
Munson, John Leonard	*Agr*	*28*	*Randolph*
Munson, Morris George	*ME sp*		*Urbana*
Murata, Motosaburo	*EE*	*33½*	*Shingu, Japan*
Murduck, Elizabeth Adams	*LAS*	*41*	*Champaign*
Murphy, Everett Franklin	*Agr (SS)*	*64*	*Marshall*
Murphy, George Raymond	*SS*	*26*	*Faribault, Minnesota*
Murphy, Howard Dawson	*Agr (SS)*	*57*	*Chicago*
Murphy, Margaret	*SS*	*14*	*Carlinville*
Murphy, Robert Brown	*ME*		*Decatur*
Murphy, Robert Emmett	*ME*		*Anderson, Indiana*
Murray, Annie Louise	*SS*		*Champaign*
Murray, David Reese	*LAS*		*Chicago*
Murray, Donald Bain	*LAS*		*River Forest*
Murray, Forrest Hamilton	*LAS*	*116½*	*Mazon*
Murray, Grace Mildred	*LAS (SS)*	*36*	*Champaign*
Murray, Margaret Blanche	*SS*	*31*	*Champaign*
Murray, Oscar James	*Bus*	*67*	*Chicago*
Murray, Robert Edward	*Agr*	*22*	*Grand Rapids, Michigan*
Murray, Sprague Elmo	*Agr*	*1½*	*Mazon*
Murrill, Hosea Raymond	*EE*		*Flat River, Missouri*
Murrill, Randall Tolman	*ME*	*93*	*Flat River, Missouri*
Musch, Harry Edwin	*LAS*		*Beardstown*
Mussenden, Ruth Isabel	*HSLAS*	*67*	*Roswell, New Mexico*
Myers, Emma Frances	*LAS*		*Huntington, West Virginia*
Myers, Harold Edwin	*Bus*		*Malden*
Myers, Rachel Flossie	*HSLAS (SS)*	*107½*	*Huntington, West Virginia*
Myers, Waldo Ray	*Bus*	*62*	*Mahomet*
Myerson, Herbert	*Bus*		*Chicago*
Mylroie, John Miller	*ME*	*110*	*Kingman, Kansas*
Nachtrieb, Georg Williams	*LAS*		*Elkhart, Indiana*
Naden, Clifford Fox	*Agr*	*19½*	*Yorkville*
Naden, Gladys Leora	*HSAgr*	*4*	*Newark*
Nafziger, John Monroe	*Agr sp*		*Hopedale*
Nag, Nripendra Kumar	*EE (SS)*	*76*	*Bengal, India*
Nag, Surendra Chandra	*MSE*	*38½*	*Calcutta, India*
Nakada, Kyoichi	*EE*	*57*	*Okayama, Japan*
Nance, Oliver Odell	*SS*	*2½*	*Jackson, Missouri*
Nay, Ernest Omar	*Med*	*81*	*Marshall*
Nealon, Daniel Fisher	*ChE*		*Chicago*
Nebel, Clarence Arthur	*Agr*	*106½*	*Clinton*
Needham, Catherine	*LAS*		*Urbana*
Needham, John Wilbert	*AE*	*36½*	*Urbana*
Needham, Minnie Lucile	*HSLAS (SS)*	*59*	*Urbana*
Needler, Julius Hequembourg	*ME*	*47*	*Chicago*
Neely, Bertha	*SS*	*49*	*Marion*
Neely, John Childs, Jr.	*A*		*Topeka, Kansas*

Neiburg, Simon Jacob	*LAS*		*St. Albans, Utah*
Nelson, Adolph Lincoln	*ME*	78	*Galesburg*
Nelson, Esther Pauline	*LAS*		*Fithian*
Nelson, George Ansley	*LAS*		*Chicago*
Nelson, Gertrude Viola	*SS*	8	*Momence*
Nelson, Idris, A.B., 1912	*Cer*		*Canton*
Nelson, James Ray	*ME*	92	*Moline*
Nelson, J Ward	*Agr*	35½	*Champaign*
Nelson, Leon Wilfred	*Agr*	67	*Knoxville*
Nelson, Milton Nels	*LAS*	97	*Chicago*
Nelson, Ralph Augustus	*ChE*	120	*Chicago*
Nelson, Walter Stephan	*EE*		*Chicago*
Nelson, William Oscar	*ME*	39	*Peoria*
Nesbitt, Carl Wesley	*Ch*		*Macomb*
Neslage, Oliver John	*ME*	89	*St. Louis, Missouri*
Netcott, Roland Earl	*AE*	37	*Independence, Iowa*
Netz, Ralph Morlan	*LAS*		*Albion, Indiana*
Neuhalfen, Mathias	*AE*	62½	*Grand Island, Nebraska*
Neuhauser, Edwin Valentine	*Bus*	6	*Gridley*
Neville, Florence Edith	*LAS*	98	*Kewanee*
Neville, Olive Myrtle	*HSLAS*		*Kewanee*
Nevins, Arthur Seymour, A. B. 1913	*SS*		*New York City*
Newburn, Iva Florence	*HSLAS*		*Urbana*
Newburn, Naomi Olive, A. B. 1914	*LAS*		*Urbana*
Newcomb, Edwin E	*A*		*Burlington, Kansas*
Newell, Florence Eleanor	*SS*	5½	*Cooperstown, North Dakota*
Newell, Lawrence Plympton	*Agr sp*		*Chicago*
Newell, Moses Elmer	*L sp*	56	*Westfield*
Newell, Ruth Brannon	*Mus*		*Norman, Oklahoma*
Newenham, Raymond	*SS*	25	*Hersman*
Newlin, Harold Vance	*LAS*	36	*Robinson*
Newlin, Ralph Thomas	*LAS*	33	*Robinson*
Newlin, Walter Allen	*Agr*	7	*Annapolis*
Newman, Frieda	*HSLAS*		*Indianapolis, Indiana*
Newman, Reuben Charles	*ME*		*Chicago*
Newton, Robert Keith	*EE*		*Jerseyville*
Nichol, George William	*Bus*	29	*Anderson, Indiana*
Nichols, Charles Henry A	*Agr*		*Hebron*
Nichols, Floris Wilson	*Bus*	68	*Toluca*
Nichols, Gladys, B. A., *(Otterbein Univ.)1914*	*Lb*		*Westerville, Ohio*
Nichols, Josephine Marie	*LAS*	29	*Dixon*
Nichols, Rae Crampton	*Agr (SS)*	108	*Chicago*
Nichols, Walter Lester	*CE*	101	*Cincinnati, Ohio*
Nickolls, Cecil Richard	*Agr sp*	56	*Champaign*
Niedermeyer, Arthur Wilhelm, A. B. *(Jas. Millikin Univ.) 1912*	*SS*		*Decatur*
Nightingale, Eugene Richard	*EE*		*Champaign*
Nilsen, Peter Jacob	*EE*	108	*Salterōd, Norway*
Nilsson, Carl Ragnar	*ME*	132	*Gothenburg, Sweden*
Niven, Will Edward	*LAS*	26	*Thorntown, Indiana*
Niver, Roe	*LAS*	114	*North Fairfield, Ohio*
Nix, Julius Carl	*CE*	¼	*Freeport*
Noack, Emilie Marie	*LAS*	96	*Chicago*
Noakes, Levi	*SS*	2	*Westfield*
Noble, Albert Wicks	*ChE*	5	*Chicago*
Noble, Joseph Morgan	*LAS*	87	*Wichita, Kansas*
Noble, Porter Charles	*Agr*		*Bloomington*
Nolan, Albert Joseph	*Agr*	63½	*Harvard*
Nolan, John Timothy	*CE*		*Gilbert, Minnesota*
Noland, Alma Elizabeth	*HSLAS*		*Indianapolis, Indiana*
Norberg, Alfred	*CE*	110½	*Champaign*
Nordstedt, Einar August	*ME*	75	*Joliet*
Norlin, Fred Christian, Jr.	*CE*	7¼	*Chicago*
Normile, John Morrissey	*A*	37	*Bloomington*
Norris, Dwight Reed	*CE*	3¼	*Newman*
Norris, Kathryn Lenore	*HSLAS*	31	*Frankfort, Indiana*
Norris, Wesley Kayler	*CE*	110	*Chicago*
Norstedt, Gardner August	*Bus*		*Joliet*
North, Clyde James	*Agr*	70	*Winchester*
North, Page Lane	*Agr*		*St. Louis, Missouri*
Norviel, Herald Bernard	*Med*		*Urbana*
Nott, Edson Lowell	*Agr*		*Byron*
Nowlen, Proctor Albert	*Agr (SS)*	86½	*Morrison*
Noxon, Elmer Warner	*ME*	68	*St. Louis, Missouri*
Noyes, Ralph Amos	*Agr*		*Waltham, Massachusetts*
Null, Charles Elgy	*Agr sp*		*Demopolis, Alabama*
Oakes, Ella Baxter	*HSAgr*	26	*Laura*
Oaks, Helen Lucille	*LAS*	41	*Kirkwood*
Oberlander, Marie	*Agr sp*		*New York City*
O'Brien, Margaret Helen	*SS*	2	*Champaign*
O'Brien, Paul Thomas	*SS*	7½	*Maple Park*
O'Brien, Walter Lawrence	*SS*	16½	*Maple Park*

Ochoa, Vizcaino Alfonso	*A*	*35½*	*Chicago*
Ochs, Chester Adam	*Bus*	*26*	*Chicago*
O'Connell, William Rolfe	*LAS*	*15*	*Springfield*
O'Connor, Elias Reynal	*CE (SS)*	*7*	*Buenos Aires, Argentina*
Odell, Arthur Allen	*Bus*	*97*	*Aguanga, California*
Ogg, James Bruce	*SS*	*8½*	*Palmyra*
Ogg, John Hurley	*ME*		*Buffalo, New York*
Ogg, Nellie May	*SS*	*2½*	*Palmyra*
O'Harra, Reaburn	*Agr*		*Chicago*
Ohinata, Chiyozi	*Bus*	*55½*	*Nagano, Japan*
Ohrman, Ruth A I	*SS*	*8*	*Harvey*
Olander, Ernest Allen	*CE*	*90½*	*Topeka, Kansas*
Olbrick, Fred George	*CE*	*80½*	*Cedar Falls, Iowa*
Olesen, Harold Loeffel	*EE*		*Highland Park*
Olin, Irene Balfour	*LAS*	*109*	*Evanston*
Olin, Irwin Blaine	*ME*	*10*	*Evanston*
Oliveras, Ovidio	*LAS sp*		*Chicago*
Olmsted, Roscoe Thomas	*LAS*		*Catlin*
Olsen, Anna Margaret	*LAS (SS)*	*110*	*Chicago*
Olsen, Arthur Alexis	*Agr*	*35½*	*Newark*
Olsen, Carlton Frederick	*ME*	*111*	*Chicago*
Olseng, Harry Christian	*Agr*	*104*	*Chicago*
Olson, Arthur Luther	*Agr*		*Chicago*
Olson, Robert Harold	*AE*	*107*	*Chicago*
Omeara, Allan Richard	*Bus*	*33½*	*Chicago*
O'Meara, James Joseph	*MSE*	*61*	*Chicago*
O'Neil. John James	*Med*	*33*	*Bloomington*
Opie, Hilda Caroline	*LAS*		*Wheaton*
Orcutt, Arthur Henry, A.B., B.S., 1914	*SS*		*Arcola*
Orland, Frank Addison	*EE*	*36*	*Murphysboro*
Orr, Clarence, A.B., 1914	*SS*		*Auburn*
Ort, Emma F	*SS*	*91*	*Wahoo, Nebraska*
Orth, Willis	*Agr sp*		*Seaton*
Osborne, Isabel Mary, A.B., 1909	*SS*		*Atlantic, Iowa*
Osburn, Reuel S	*SS*	*35*	*Wilmington*
Ostermeier, Bertha Johanna	*SS*	*5*	*Springfield*
Ostrom, Hallas Willard	*ChE*		*Chicago*
Oswalt, Benjamin Alonzo	*SS*	*56½*	*Anderson*
Ott, David Lee	*ME*	*62½*	*Prophetstown*
Ott, John Ehem	*ME (SS)*	*35½*	*Chicago*
Ott, Percy Wright	*MSE*	*47*	*Mt. Hermon, Louisiana*
Ottinger, Tracy Rollin	*L*	*38½*	*Delta, Ohio*
Otto, Gordon	*Agr*	*34½*	*Peoria*
Otto, Harwood	*Med*		*Peoria*
Oughton, John Richard, Jr.	*Agr sp*		*Dwight*
Overbagh, Alfred Alan	*LAS (SS)*	*6*	*Chicago*
Overend, Harrison George	*A*	*57½*	*Edelstein*
Overton, Ralph Marion	*ME*	*37*	*Winchester*
Owen, Charles Norton	*ME*	*81*	*Chicago*
Owen, Harold Patterson	*CE*		*Chicago*
Owen, Harry Leo	*AE (SS)*	*67*	*Plano*
Owens, Allan Philip	*SS*		*Cleveland, Ohio*
Owens, Bernice Russell	*HSAgr (SS)*		*Pana*
Owyang, George Taikin	*Med (SS)*		*Courtland, California*
Oyler, James Lloyd	*Agr*	*66*	*Taylorville*
Pack, Mary	*HSLAS*	*3*	*River Forest*
Paddock, Arthur Clyde	*AE*	*3*	*Fort Worth, Texas*
Paddock, Rolf Cottingham	*Bus*		*Pana*
Page, George James	*ChE*	*35*	*Chicago*
Pagin, John Beitner	*ME*	*95*	*La Grange*
Painkinsky, David	*Ch*		*Chicago*
Paisley, Sela Isabel	*Mus*	*55*	*Urbana*
Palfrey, John Robert	*Agr*		*Urbana*
Palmer, Arthur Bowen	*CE*		*Mt. Pleasant, Iowa*
Palmer, Charles Shattuck	*Ch (SS)*	*32*	*Urbana*
Palmer, Gerald Lewis	*Bus*	*52*	*Chicago*
Palmer, Robert Carrell	*AE*		*Des Moines, Iowa*
Pancoast, Donald A	*ME*		*Springfield*
Panhoe, Henry Aki	*CE*	*119*	*Huang Shan, China*
Panhorst, Frederick William	*CE*	*107*	*Urbana*
Pankow, Grace Elizabeth	*LAS*		*Elgin*
Parish, William Love	*AE*	*76*	*Greenfield*
Park, Jay Peter	*Agr*		*Chicago*
Parker, Benjamin	*Agr sp*		*Chicago*
Parker, Carolyn Adelaide	*HSLAS*		*Aurora*
Parker, George Thomas	*Agr*	*37*	*Carrollton*
Parker, Joel Weaver	*CE*		*Mattoon*
Parker, Raymond Webb	*EE*	*106*	*Champaign*
Parker, Warren Kender	*Agr*	*100½*	*Arlington Heights*
Parkinson, Kenneth Warren	*Agr*	*69*	*Maxwell*
Parkinson, Raymond Fielding	*LAS*		*Carbondale*
Parks, Catherine Elizabeth	*LAS*	*48*	*Du Quoin*
Parks, Clarence Runyan	*Agr sp*		*Chicago*

Parks, Frank Austin	*Bus*	*11*	*Urbana*
Parks, Wilma Gay	*LAS*	*97*	*Cooperstown*
Parmely, Maurice Edmund	*Agr*		*Urbana*
Parmely, Miles McKinstry	*Ch (SS)*	*7*	*Urbana*
Parr, Arthur Eldon	*Agr*		*Champaign*
Parr, Harold Lucien	*Cer*	*47*	*Urbana*
Parr, Louise Charlotte	*LAS*		*Lockport*
Parret, June Elizabeth	*SS*		*Farmer City*
Parrilli, Henry	*EE (SS)*	*26*	*Chicago*
Parsons, Glenn Rawls	*SS*		*Creston, Iowa*
Parsons, Harry McLauchlan, B.S., 1912	*LAS*		*Chicago*
Pastel, Alfred Robert	*AE*	*10*	*Chicago*
Patch, Mayhew Wilbur	*Agr*		*Smithshire*
Pathak, Mukand Lall	*EE*	*59*	*Mauko, India*
Patten, Norman Bond, Jr.	*AE*	*117*	*Minneapolis, Minnesota*
Patterson, Charles Roy	*L*	*59*	*Sullivan*
Patterson, Joseph Julian	*A*	*61*	*Danville*
Patterson, Nellie Rand	*HSLAS*	*52*	*Chicago*
Patterson, Willa Ruth	*SS*	*5½*	*Baldwin*
Patton, Charles	*Agr*	*36⅔*	*Urbana*
Patton, Frederick William	*Agr*	*30*	*Montclair, New Jersey*
Patton, John V	*LAS*	*2¼*	*Atlanta*
Patton, Richard Chalmers	*LAS*		*Atlanta*
Paul, Frank Martyn	*ME*		*Kewanee*
Pauli, Adolph Frederick	*LAS*	*69*	*Peoria*
Pause, Clara Elnora	*Bus*		*Chicago*
Pause, Herman John	*EE*		*Chicago*
Pavey, Charles Allen	*Bus*		*Chicago*
Peadro, Bernice F	*LAS*	*60*	*Sullivan*
Peale, Margaret	*HSLAS*		*Belvidere*
Pearry, Major James	*LAS sp (SS)*		*St. Maurice, Louisiana*
Pearson, Francis H	*ME*		*Hinsdale*
Pearson, Homer Arnold	*EE*	*36*	*Thorntown, Indiana*
Pecchia, Victor Anthony	*CE*	*6¼*	*Chicago*
Peck, Fred Albert, Jr.	*EE*	*10*	*Chicago*
Peck, Norman Lee, A. B. *(Ottawa Univ.)* 1913	*Lb*	*33*	*Ottawa, Kansas*
Peck, Roy Lee	*CE*	*67*	*Oak Park*
Pedler, Russell Henry	*ME*	*63*	*Chicago*
Peirce, Earle Carleton	*ME*	*107*	*Chicago*
Peirson, Mary Lucile	*HSLAS*		*Murphysboro*
Pell, Hazel Marie	*HSAgr*		*Urbana*
Pemberton, Bessie Belle	*SS*	*8¼*	*Eldorado*
Pemberton, Ina Mamie	*SS sp*	*7½*	*West Plains, Missouri*
Pendarvis, Harry Reed	*EE*	*81*	*Chicago*
Pendarvis, Wilbur Otis	*LAS*	*102*	*Media*
Penhallow, Lambert Benjamin	*ME*		*Chicago*
Penn, Josephine Emily	*SS*	*3½*	*Springfield*
Pennewill, Patience Elizabeth	*LAS*	*28*	*Washington*
Penrose, Alma Meriba, A. B. *(Oberlin Coll.)* 1901	*Lb*	*48*	*Urbana*
Percival, Joseph W	*Agr*		*Champaign*
Percival, Lilley Ruth	*HSAgr*		*Urbana*
Percival, Marion Louise	*LAS*	*102½*	*Champaign*
Percival, Stella Rebecca	*Mus*	*49*	*Champaign*
Perkins, Frances Janet	*LAS*	*14*	*Laurel, Mississippi*
Perkins, Lester Belz	*Agr*	*33*	*Oak Park*
Perlman, William Polakow	*AE*	*40*	*Chicago*
Perrott, Richard Henry	*SS*	*70*	*Catlin*
Perry, Herschel George	*Agr*		*Carthage*
Perry, Margaret Campbell	*HSLAS (SS)*	*98*	*Urbana*
Perry, Nelle	*SS*	*117*	*Robinson*
Perry, Ralph Grover	*MnE*	*100*	*Urbana*
Perry, Robert Ashman	*ME*	*37*	*Urbana*
Perry, Winifred Almina, A. M. 1914	*LAS*		*Urbana*
Peters, Everett Robert	*Agr*		*St. Joseph*
Petersen, Marvie Hecht	*Agr*		*Chicago*
Peterson, Chester Almon	*Agr*	*33*	*Galesburg*
Peterson, Eleanor Sarah	*HSAgr*	*123*	*Galesburg*
Peterson, Joe Oliver	*Med*	*29*	*Princeton, Minnesota*
Peterson, Joel Asbury	*LAS*		*Urbana*
Peterson, John Wallace	*Agr sp*	*21*	*Urbana*
Peterson, Reuben Walter	*Agr*	*33*	*Chicago*
Peterson, William Chandler	*A*	*69*	*N. Crystal Lake*
Pethybridge, Frank Howard	*Agr*	*32*	*Chicago*
Petroff, Racho Poppove	*EE*	*26*	*S. Musina, Bulgaria*
Petter, Margaret Miller	*HSAgr*	*16*	*Cairo*
Petter, Stanley Dubois	*ME*		*Paducah, Kentucky*
Pettit, Arthur Edwin	*LAS*	*33*	*Stuttgart, Arkansas*
Petty, DeWitt Talmage	*SS*	*8*	*Sumner*
Petty, Ross Manley	*Agr*	*30*	*Sumner*
Pettys, Wilbur Orlando	*ME*	*27½*	*Urbana*
Petzing, Edwin Rudolph	*EE*		*Shumway*

Peyraud, Albert Paul	*A*	*81*	*Chicago*
Pfeiffer, Conrad Louis	*EE*	*41*	*Chicago*
Pfeiffer, Rudolph Salisbury	*ME*	*42½*	*Peoria*
Phalen, Robert William	*Bus*		*Evanston*
Pheanis, Russell Hitchner	*Bus*		*Monticello*
Phelps, Howard Horace	*Agr*	*106*	*Wells, Michigan*
Philbrick, Lois	*LAS*	*31*	*Champaign*
Phillips, Alice Emma	*HSLAS*		*Champaign*
Phillips, Harriet Muriel	*LAS*	*6*	*Chicago*
Phillips, Jay Hamilton	*Med*	*68*	*Chicago*
Phillips, Joseph Edward	*Agr*		*Green Valley*
Phillips, Minnie Alice	*HSLAS*		*Sullivan*
Phillips, Ruth	*HSLAS*	*32*	*E. Cleveland, Ohio*
Phillis, Louis Irving	*ME*	*2*	*Chicago*
Phipps, James Blain	*LAS*		*McDonald, Kansas*
von Phul, William, Jr.	*CE*	*60*	*New Orleans, Louisiana*
Picken, John Francis	*Agr*		*Argyle*
Picken, Ralph Montgomery	*Agr*		*Argyle*
Pickett, Arthur William	*CE*		*Chicago*
Pieper, John	*Agr (SS)*	*81*	*Urbana*
Pierce, Benjamin Elmer	*CE*		*Genoa*
Pierce, Clinton Albert	*CE*	*39*	*Brooklyn, New York*
Pierce, Harvey James	*A*		*Dayton, Ohio*
Pierson, Walter Raymond	*LAS*	*75*	*Princeton*
Pifer, Harry Charles	*SS*	*5½*	*Lovington*
Pihlgard, Eric Frederick	*A*	*72½*	*Chicago*
Pike, George Hyde	*Bus*	*100*	*Silvis*
Pilchard, Edwin Ivan	*Agr*		*Mansfield*
Pillsbury, Harold Fleming	*Agr sp*		*Monmouth*
Pinault, Louis Clovis	*A*	*131½*	*St. Joseph, Minnesota*
Pinkley, James Pierpont	*A*	*68*	*Gibson City*
Pinkney, Fred Theodore	*ChE*	*88*	*Chicago*
Pinkney, Leslie Arthur, A. B. *(Wheaton Coll.) 1910*	*SS*	*8*	*Sterling*
Piper, Leo Edward	*A*		*Byron*
Pitsenbarger, Ethel Gertrude	*LAS*	*42*	*Champaign*
Pitts, John Joseph, Jr., A. B., 1914	*Agr*		*Bloomington*
Plagge, Irwin Fred Willard	*Ch*	*33½*	*Deerfield*
Pletcher, Velma Coe	*HSLAS*	*64*	*Rochester, Indiana*
Plunkett, James Willis	*Bus*		*Kansas City, Missouri*
Plymale, Betha	*HSLAS sp*		*Huntington, West Virginia*
Poehlmann, Earl Franklin	*Agr*	*5*	*Morton Grove*
Pogue, Harold Austin	*Bus*	*66*	*Decatur*
Poirot, Severine Andrew	*L*		*Belleville*
Polakow, Alexander Hyman	*ChE*	*98*	*Chicago*
Polk, Robert Edmund	*Cer*	*38*	*La Grange*
Polk, Wesley William	*MSE*	*65*	*La Grange*
Pollock, Harry Robb, B. S., 1914	*SS*		*Clinton*
Pollock, Leone Ruth	*HSLAS*		*Polo*
Pollock, Samuel McNab	*Agr sp*	*25½*	*Seaton*
Ponder, Wilma Edith, A. B., 1912	*Lb*		*Urbana*
Pool, Ernest Howard	*L*		*Ottawa*
Pope, Lawrence Arthur	*EE*	*127*	*Moline*
Porter, Clarence L	*Med*	*32*	*Belvidere*
Porter, Harry Hubert	*MnE*	*36*	*Gerlaw*
Porter, Webster K	*ChE (SS)*	*65½*	*Belvidere*
Postel, Frederick William	*Bus*	*102*	*Mascoutah*
Postel, Urban Stuart	*Bus*	*3½*	*Mascoutah*
Postlewait, Harriet Leotine	*LAS sp*	*29½*	*Urbana*
Potter, Ellis J	*A*	*121*	*Champaign*
Potter, Emery Vern	*EE (SS)*	*97½*	*Champaign*
Potter, Glenn Edward	*EE*	*37*	*Springfield*
Potter, Phil Harry	*Agr*	*17½*	*Chicago*
Powell, Hazel Florence	*SS sp*	*1¼*	*Champaign*
Powers, Fred Richmond	*Agr*	*121½*	*Tiskilwa*
Powers, John Howard	*Bus*	*35*	*Decatur*
Powers, J Orin	*SS*	*118½*	*Champaign*
Powers, Ray Austin	*Agr*	*26*	*Joliet*
Prall, Beatrice, A. B. *(Univ. of Arkansas) 1911*	*Lb*		*Hope, Arkansas*
Pratt, William Carl	*Agr*	*3½*	*Rockford*
Presson, Harry Bristol	*LAS*	*9½*	*Champaign*
Presson, Lola Iris	*HSLAS (SS)*	*69*	*Champaign*
Price, Melville Halsey	*ChE*	*32*	*Chicago*
Price, Miles Oscar, S. B. *(Univ. of Chicago) 1914*	*Lb*	*7*	*Plymouth, Indiana*
Price, Neil	*SS*		*Detroit, Michigan*
Price, Raymond Lester	*EE*		*Rockford*
Primm, James Kelly	*LAS*	*72*	*Champaign*
Primm, Philip Timon	*Agr*	*64*	*Champaign*
Prince, Ben James	*Agr*		*Lansing*
Prince, William Jasper	*Ch*	*90½*	*Coin, Iowa*
Pritzlaff, Charles Phillip John	*CE*	*89*	*Chicago*

Propst, Duane Willard	*LAS*	*70*	*Springfield*
Pruett, Eugene Francise	*Agr*	*64*	*Kinmundy*
Prutsman, Harold Claude	*ME*		*Princeton*
Puetz, John Carlyle, Jr.	*LAS*		*Hinsdale*
Pugh, Ada Roberta	*HSLAS (SS)*	*96*	*Champaign*
Fulcipher, K DeWitt	*LAS*		*Centralia*
Pulsipher, Irene Emma	*HSAgr*	*63*	*Elmwood*
Purcell, Bryant	*Agr*		*Polo*
Purcell, William Thomas	*AE*	*39½*	*Chicago*
Purdy, Raymond Harry	*A*	*107*	*Vincennes, Indiana*
Purnell, William Frank	*Agr*		*Muncie*
Pursell, James Roland	*EE*	*15*	*Chicago*
Pursley, Emma Stine	*LAS*	*103*	*Kansas City, Missouri*
Pusey, Frank Whitcomb	*Agr*	*102*	*Fresno, California*
Pyron, John Elder	*ChE (SS)*	*64*	*St. Louis, Missouri*
Quandt, Coramae	*HSAgr*	*28*	*Urbana*
Quesenberry, Ruth Lucille	*HSLAS*	*58*	*Mansfield*
Questel, Benjamin Harrison	*Agr (SS)*	*63*	*Carmi*
Quick, Harry	*ME*	*37*	*Tiskilwa*
Quin, Belle	*SS*		*Grand Rapids, Wisconsin*
Quinn, Florence Katherine	*Mus*	*14*	*La Fayette*
Quinn, Francis John	*CE*		*Chicago*
Raaberg, Ralph Skancke	*AE*	*39*	*Chicago*
Racheff, Ivan	*CE*		*Lovech, Bulgaria*
Radell, Fred Zeigler	*Agr Sp*	*27*	*Chicago*
Rafferty, John Joseph	*ME*	*77*	*Chicago*
Rafferty, Raymond Charles	*Agr*	*3*	*Canton*
Raffowitz, Frank	*ME*	*77*	*Chicago*
Rahn, Harry H	*Bus*		*Tuscola*
Rahn, Lester Addison	*Agr*		*Lenark*
Rahn, Reinhardt Philip	*ME*	*36*	*Thornton*
Rahn, Robert Charles	*CerE*	*58*	*Chicago*
Rahn, Rudolph	*ME*	*37*	*Thornton*
Raibourne, Claude	*Bus*	*66*	*Waterloo*
Raibourne, Paul Albert	*EE*	*23*	*Waterloo*
Raines, Lester Courtney	*LAS*		*Milford*
Raithel, Arthur Christopher	*EE*	*81*	*Chicago*
Rall, Eugene Robert Paul	*CE*	*111*	*Chicago*
Ramsay, Crawford John	*SS*	*76*	*Martinville*
Ramey, Frank Willard	*A*	*40*	*Champaign*
Ramser, John Hubert	*ME*	*37*	*Alma*
Randall, Frank John	*Agr*		*Aurora*
Randall, Grace Louise	*LAS*	*25*	*Rogers Park*
Randall, Thomas David	*CE*	*115*	*Chicago*
Randolph, Cora Creagor	*LAS*	*32½*	*Kansas City, Missouri*
Randolph, Edith Schultz	*SS*	*8*	*Fort Scott, Kansas*
Ranes, George Ottit	*EE*		*Lawton, Oklahoma*
Rang, Carl King, A. B., 1914	*L*	*24*	*Rockford*
Ranger, Katherine Mae	*LAS*	*70*	*Harvey*
Rankin, Luro Jane	*HSLAS*		*Payson*
Rankin, Robert Edmund	*Agr Sp*		*Payson*
Ranney, George Henry	*Bus*		*Chicago*
Ranney, Joel Alden	*Agr*	*27*	*Cazenovia*
Ranney, Nathan, Charles	*Agr*		*Little York*
Ranney, Willard Parminter	*Agr*	*34*	*Cazenovia*
Raphaelson, Sampson Miles	*LAS*		*Chicago*
Rapp, Edwin Wallace	*Med*	*63*	*Aurora*
Rapp, John Holly	*LAS (SS)*	*105½*	*Fairfield*
Rapp, Peter George	*LAS*	*57*	*Fairfield*
Raskewitz, Arthur	*ME (SS)*	*40*	*Chicago*
Ratcliff, Glenn	*L (SS)*	*57*	*Greenup*
Ratcliffe, Isaac La Grange	*Bus*	*72*	*Highland, Kansas*
Rathhun, Hubert Honens	*Agr*	*35*	*Spring Valley*
Rathfon, William Owen	*CerE*	*109*	*Chicago*
Rathje, Paul William	*Agr*		*Peotone*
Rathsack, Robert Everett	*ME*	*27*	*Greenview*
Rawlings, Howard Charles	*EE*		*Farmer City*
Ray, Bankim Chandra	*EE*	*116*	*Barisal, India*
Ray, Hugh Light	*SS*	*75*	*Chicago*
Ray, Luke Cranston	*Med*		*Fort Worth, Texas*
Ray, Julian David	*SS*	*101½*	*Hagarstown*
Rayburn, Allan Barnes	*Agr*	*103*	*Bloomington*
Reace, William Thomas	*EE*	*109*	*Chicago*
Read, William Gordon	*Bus*		*Bloomington*
Reading, Clarence	*Agr*		*Mazon*
Reagan, Maurice Edwin	*EE*	*54½*	*Canton*
Real, John Jeremiah	*Bus*	*35*	*Sterling*
Redig, Carl Francis	*Agr*		*Chicago*
Reding, Ralph Spears	*Agr*		*Pekin*
Redmon, Minnie	*SS*	*5½*	*Decatur*
Reece, Austin Newton	*Agr*		*Springfield*
Reed, Chester Otis, B.S. *(Cornell)* ,1911	*LAS*		*Fittsford, New York*
Reed, Daisy	*LAS*		*Herrin*

Reed, Mrs. Fay R.	*SS*		*Urbana*
Reed, Gratia Jewett	*HSLAS*	*102*	*Warsaw*
Reed, Hazel Viola	*HSAgr*	*31*	*Webster Grove, Missouri*
Reed, Leo Bracy	*ME*		*Eldorado*
Reed, Maurice Johnson	*MnE*	*37*	*Emerson*
Rees, Oliver Perry	*SS*	*3*	*Vermillion Grove*
Reese, Leal Wiley	*LAS (SS)*	*71½*	*Urbana*
Reese, Lucile Nancy	*Agr (SS)*	*29*	*Urbana*
Reese, Raymond Leslie	*Agr (SS)*	*7*	*Jonesboro, Arkansas*
Rehling, Charles Henry	*Agr*	*97½*	*Waterloo*
Rehm, George Edward	*Agr sp*		*Chicago*
Rehnquist, Ernest Ferdinand	*EE*	*35*	*Chicago*
Reichelderfer, Harry	*EE*		*Peoria*
Reichenbach, Jay C	*Bus*		*Centralia*
Reid, George Hoster	*Agr*		*Mt. Vernon*
Reid, Harold Speer	*Agr*		*St. Paul, Minnesota*
Reid, Leo Woodruff	*EE*	*60*	*Mt. Vernon*
Reid, Mollie	*SS*	*138*	*Ozark*
Reinel, Bert Edwards	*L*		*Streator*
Reinhart, Irvin Julius	*Agr sp*	*98*	*Alhambra*
Reinmann, Frank Leo	*ME*		*Peoria*
Reinsch, Bernhard Paul	*A (SS)*	*87*	*Tama, Iowa*
Remington, Mac	*A*		*St Louis, Missouri*
Renner, Enos Henry, Jr.	*Agr*		*Urbana*
Renner, Julia Elizabeth	*LAS*	*98*	*Urbana*
Renning, Albert Gordon	*Bus sp*		*Highland Park*
Reno, Guy Benjamin	*L*		*Browning*
Renolds, Magdalene	*LAS*		*Cairo*
Rentchler, Edna Kerr	*LAS (SS)*	*92½*	*Belleville*
Rentschler, Truman	*Med*		*Dawson*
Renwick, George W	*ME*	*75*	*Chicago*
Reschetz, Ernest Mathias	*EE*	*37*	*Staunton*
Retherford, Miriam Browning	*HSLAS*	*2*	*Carthage, Indiana*
Retz, Catherine Mabel	*HSLAS*	*31*	*Ottawa*
Reuling, Clarence Weiss	*Bus*	*30*	*Morton*
Re Veal, Ivan Lindsay	*Ch*		*Hoopeston*
Reynolds, Ora Edgar	*LAS*	*60*	*Guthrie*
Rhea, Chleo James Jared	*REE*	*125½*	*Jacksonville*
Rhoads, Marie Corzine	*LAS*		*Champaign*
Rhodes, Carlyle Seeds	*CE*	*75*	*Lovington*
Rhodes, Elmer Harvey	*SS*	*5½*	*Pittsfield*
Rhodes, Eugene Oliver	*LAS*		*St. Louis, Missouri*
Rhodes, John Millard	*CE*		*Kansas*
Rhodes, Martin Clifford	*CE*		*Chicago*
Rhue, Perry Marion	*Bus*		*Champaign*
Ribback, Louis	*Agr (SS)*	*97*	*Chicago*
Rice, Katherine Grace	*LAS*	*21*	*Philo*
Rice, Than Givens	*EE*		*Providence, Kentucky*
Rich, Donald Bert	*Agr*	*104½*	*Chicago*
Richards, Alice Mary	*SS*		*Greenville*
Richards, Carl	*SS*		*Petersburg*
Richards, Lenore	*HSLAS*	*105*	*Urbana*
Richards, Leo J	*REE*		*Trenton, Missouri*
Richards, Russel Robert	*MnE*		*Gibson City*
Richardson, Francis Edward	*Agr*		*Chicago Heights*
Richardson, Harvey Russel	*EE*	*37*	*Morristown, New York*
Richardson, Helen	*SS*		*Oak Park*
Richardson, Jaunita Bonnie	*HSAgr (SS)*	*103*	*Danville*
Richart, Berta Estelle	*HSLAS*		*Urbana*
Rickart, Blanche Belle	*HSLAS (SS)*	*21*	*Champaign*
Richers, Edgar Mathew	*LAS (SS)*	*23*	*Altoona, Pennsylvania*
Richman, James Herbert	*EE*		*Villa Grove*
Richmond, George Kerns	*Bus*	*99½*	*Prophetstown*
Richmond, Warren McLellen	*Agr*	*38*	*Geneseo*
Ricker, Ethel	*A sp*		*Urbana*
Ricks, Juanita	*Bus*		*Urbana*
Rider, George Clinton, Jr.	*LAS (SS)*		*Pekin*
Ridge, Francis Marion	*LAS*	*26*	*Champaign*
Riegel, Bertha	*HSAgr sp*		*Galatia*
Rigg, Granville Leroy	*Agr sp*	*90½*	*Goldengate*
Riggs, Mildred Eleanor	*HSLAS*	*53½*	*Atwood*
Riley, Raymond James	*Cer*	*16*	*Terre Cotta*
Rimes, Harry Lahue	*Bus*	*30*	*St. Joseph, Michigan*
Rinaker, Dorothy Sue	*HSLAS*	*97*	*Springfield*
Rinaker, John Irving	*Agr*		*Springfield*
Rinnman, Harry	*Agr*		*Chicago*
Ripley, Jean Kimberley	*Agr*	*96*	*Chicago*
Rising, John David	*Bus*		*Champaign*
Ritchie, Raymond Rockwood	*SS*	*6*	*Southport, Indiana*
Ritchey, Royal Wane	*Agr*	*105*	*Urbana*
Ritchie, Guy Lester	*Agr*	*34*	*Billett*
Ritchie, Jeanette	*HSAgr*		*Kansas City, Missouri*
Ritt, Walter William Henry	*A*		*Crystal Lake*

Ritter, John Gilman	*AE*	*47*	*Chicago*
Ritter, Walter Theobald	*REE*	*10*	*Chicago*
Ritts, Charles Laurance	*A*	*96*	*Drumright, Oklahoma*
Rives, Nannie Baxter	*LAS (SS)*	*98½*	*Rockbridge*
Roach, Doris Eleanor	*LAS*	*80*	*Decatur*
Roane, Theodore	*LAS*	*80*	*Chicago*
Robbins, Ruth	*LAS*	*96*	*Congress Park*
Roberson, Mary	*SS*	*24½*	*Villa Ridge*
Roberts, Kathleen Alice	*SS*	*2*	*Champaign*
Roberts, Claude Morrill	*Bus*		*Decatur*
Roberts, Harold Higbee	*ME*	*114*	*White Hall*
Roberts, Jerome Gillispie	*MnE*	*24*	*Chicago*
Roberts, Malcolm Douglas	*Agr*	*28*	*New York City*
Roberts, Nellie Read, A.B., 1913	*Lb*	*38*	*Champaign*
Roberts, Roland George	*A (SS)*	*33½*	*Oak Park*
Roberts, Thomas Tenbrook, Jr.	*Agr sp*		*Decatur*
Robertson, Arthur Beekman	*Agr*		*Petersburg*
Robertson, Charles Venable	*Agr*	*35*	*Carlinville*
Robertson, Dale Robert	*EE*		*Albion*
Robertson, Hugh Schuyler	*Cer*	*78*	*Peoria*
Robertson, Ina	*SS*	*4*	*Edwardsville*
Robertson, Miriam Selina	*HSAgr*	*32*	*Champaign*
Robinson, Albert William	*ME*	*75*	*Oak Park*
Robinson, Ethelyn Clyde	*HSLAS*		*La Salle*
Robinson, Gertrude Francis	*SS*	*5*	*Pittsfield*
Robinson, Glenn Warren	*Agr*	*33½*	*Lincoln*
Robinson, Henry Duncan	*ME*	*41*	*Rockford*
Robinson, Hugh Dean	*LAS*		*Harvey*
Robinson, John Lester	*L sp*	*28*	*Mt. Vernon*
Robinson, Ruth Love	*HSAgr*	*65*	*Edwardsville*
Robinson, Warren Isaac	*Agr*	*34*	*La Salle*
Robison, Edna Lena	*SS*	*5*	*Pittsfield*
Rockey, Paul Thomas	*AE*	*30½*	*Freeport*
Rodee, Palmer	*Agr*		*Prophetstown*
Rodgers, Perry Harrison	*SS*	*40½*	*Atwood*
Rodriguez, Antonio	*CE*		*Mata, Cuba*
Roe, Raymond	*A*		*Chicago*
Roesner, Hedwig Elisabeth	*Mus (SS)*	*86½*	*Moline*
Roessler, William Otto	*Agr*	*72½*	*Shelbyville*
Rogers, Beulah	*LAS*	*78*	*Chicago*
Rogers, Elsie Marie	*HSLAS (SS)*	*36*	*Urbana*
Rogers, Gardner Spencer	*Agr*	*53*	*Evanston*
Rogers, Harry Barrett	*CE*	*107½*	*Chicago*
Rogers, Harry Thomas	*AE*	*76*	*Champaign*
Rogers, Henry Sheldon	*Agr*	*83*	*Marengo*
Rogers, Paul Hauser	*L*	*22*	*Atlanta*
Rogers, Russel David	*AE*	*73*	*Pekin*
Rogge, Lena Maria	*SS*	*8*	*Tallula*
Rohlfing, Walter Louis	*Agr*	*66*	*Groveland*
Rohn, Fred Andrew	*AE*	*71*	*Chicago*
Rohrer, Frank Philip	*LAS*	*71*	*Gilman*
Rolfe, Amy Lucile, A.B., 1908	*Mus*		*Champaign*
Rollins, Neta	*LAS*		*Paxton*
Rollo, John Newton	*Agr*		*Chicago*
Romeiser, Edwin	*Agr*	*34*	*Belleville*
Romero, Newman	*LAS*		*Valparaiso, Chile*
Romig, Jesse Arnold	*EE*	*2*	*Champaign*
Romine, Joseph Fred	*Agr*	*99*	*Atwood*
Rominger, William Edgar	*L sp*		*Shelbyville*
Rompel, Ruth Edith	*LAS*		*Champaign*
Roos, Edwin George	*Agr*	*39*	*St. Louis*
Root, Kimball Valentine	*LAS*	*100*	*Chicago*
Rooth, Carrie Lee, A.B., 1914	*LAS*		*Joy*
Rooth, James	*ME*		*Joy*
Roscoe, George Howard	*Agr*	*41*	*Blue Island*
Rose, Harold Boone	*ME*	*88½*	*Urbana*
Rose, Walter Silver	*LAS*	*3*	*Chicago*
Roseman, Leanor	*LAS*	*25*	*Chicago*
Rosen, Bernard	*Bus*		*Chicago*
Rosenberg, Frank	*CerE*	*72*	*Chicago*
Rosenberg, Herbert Bernard	*Agr*	*62*	*Granite City*
Rosenstone, Ruth Carlyn	*Mus sp*		*Cambridge*
Ross, Gertrude Duncan	*LAS sp*		*Philo*
Ross, Harry Albert	*Agr*	*30*	*Greenville*
Ross, Herbert Emil	*LAS*	*26½*	*Evanston*
Ross, John McLinn	*LAS*	*24*	*New Haven, Connecticut*
Ross, Kenneth Dwight	*Bus*	*75*	*Grand Island, Nebraska*
Ross, Nelda Glendora	*HSAgr*		*Easton*
Ross, Stanley Parker	*A*		*Champaign*
Rossett, Louis	*EE*	*114*	*Chicago*
Rotrock, Howard Moore	*CE*	*73*	*Chicago*
Rounds, Fred Grafton	*A*	*110*	*St. Paul, Minnesota*
Rourke, Ellen Mary	*LAS*	*74*	*Springfield*

Rourke, Ethel Ruth	*SS*		*Divernon*
Rourke, Margaret Elizabeth	*SS*	19½	*Springfield*
Rowe, Charles Baer	*A*	36	*Chicago*
Rowe, James	*ME*	37	*Three Rivers, Michigan*
Roy, Walter Clarence	*SS*	8	*South Chicago*
Rubright, Franklin Le Roy	*Med*		*Emerson*
Ruby, George Benjamin	*ChE*	106	*Yorkville*
Rue, Orlie	*ME*	110	*Mattoon*
Ruedi, Charles Henry	*AE*	29	*St. Louis, Missouri*
Rueff, Joseph Alvin	*ME*	64	*Oak Park*
Ruehe, Mabel Louise	*Mus (SS)*	89	*Urbana*
Ruehl, Ray Edward	*Agr*		*Chicago*
Ruffner, Rachel	*HSAgr*	29	*Casey*
Rugg, Earle Underwood	*LAS (SS)*	96½	*Fitchburg, Massachusetts*
Rugh, Lucien Edgar	*ME*		*Argenta*
Rukin, Max	*Bus*	95	*Brooklyn, New York*
Rumsey, Mary Hilliard	*LAS*	54½	*Mattoon*
Rundle, Howard Edward	*REE (SS)*	70	*Iron Mountain, Michigan*
Rundle, W B	*Agr*	34	*Clinton*
Rundles, Charles Morton	*LAS*	78	*Huntertown, Indiana*
Rundles, Don Cameron	*Agr*	108	*Huntertown, Indiana*
Rundles, William Lloyd	*Agr*	84	*Huntertown, Indiana*
Rundquist, Elmer Theodore	*Agr*		*Harvey*
Runneberg, Elton Cromwell	*Agr*	36	*Hillside*
Runyan, Clarence Edson	*A*	66	*Creswell, Oregon*
Rush, Ira Leon	*A*	124½	*Great Falls, Montana*
Rush, Paul White	*Bus*		*Pittsfield*
Rush, Roy Leslie	*LAS*	66	*Mesa, Idaho*
Rusk, Henry Perly	*SS*		*Columbia, Missouri*
Russell, Edwin Avery	*CE*		*Buffalo, New York*
Russell, Eugene Hamilton	*Agr*		*Champaign*
Russell, Virginia Elizabeth	*SS*		*Champaign*
Russett, Jasper Philip	*A*	48	*Cedar Rapids, Iowa*
Rust, Clarence O	*Agr*		*Elgin*
Rust, Louis John	*EE*	74	*Pekin*
Rusy, Ben Franklin	*Agr*	45½	*Chicago*
Rutenber, Frances Marie	*HSLAS*	101	*Champaign*
Ruth, Rowland William	*ME*	109	*Aurora*
Ruth, Thomas Lenor	*L*	55	*Champaign*
Rutherford, Eugenia Elizabeth	*LAS*	106	*Newman*
Rutherford, Florence	*LAS*		*Newman*
Rutledge, Burtch Irwin	*LAS*	69	*Chatsworth*
Ryan, Frank Warren	*MSE*		*Lincoln*
Ryan, Walter Richard	*LAS*		*Alton*
Ryther, Henry White	*ME (SS)*	133½	*Chicago*
Sachs, Ward Hanson	*Agr sp*		*Towanda*
Sachrison, Julius Alvin	*Agr sp*	101	*Batavia*
Sadler, Lucile	*LAS*	30	*Grove City*
Saffel, Gladys Deforest	*LAS*	54	*Urbana*
Sailer, Frank	*Agr*		*Chicago*
Sailor, Ira Carl	*Agr*	94	*Cissna Park*
Sailerno, Joao	*A*		*Sorocaba, Sao Paulo, Brazil*
Salisbury, George Washington	*Agr*	134	*Astoria*
Salisbury, Meta Emogene	*HSLAS*		*Urbana*
Salladin, George Edward, Jr.	*Bus*		*Milford, Nebraska*
Sallee, Gordon Francis	*ME*	52	*Litchfield*
Saltzman, Herbert Sollie	*A*	40	*Chicago*
Samuels, Freda Irma	*LAS*	55	*Chicago*
Samuels, Theresa Minna	*LAS*		*Chicago*
Samuelson, Raphael Adelford	*EE*	100½	*Elgin*
Sandehn, Casper Wilhelm	*LAS*		*Rockford*
Sanders, George Edward	*SS*	104½	*Champaign*
Sanford, Harriet Adelaide	*HSLAS*	64	*Danville*
Sankee, Ruth, A. B., *(Univ. of Kans.)*, 1914	*Lb*		*Lawrence, Kansas*
Santiago, Alfredo Viola	*AE*		*S. Miguel, Bulacan, P. I.*
Saperston, Q Nathan	*EE*	106	*St. Charles*
Sarett, Lew R, A. B. *(Beloit Coll.)*	*L*	21	*Chicago*
Sargeant, Francelia Plumley	*Bus*		*Indianapolis, Indiana*
Saul, Charles James	*Bus*	56	*Dennison, Iowa*
Saunders, Carl Jefferson	*Bus*		*Roswell, New Mexico*
Savage, Marie	*LAS*	103	*Urbana*
Savage, Mary Franklin	*LAS*	28	*Bellcville*
Savage, William Chauncey	*Agr*	36	*Frankfort, Michigan*
Savage, William Elliott	*Med*	60½	*Belleville*
Saville, Edward William	*Agr*	26½	*Canton*
Sawers, Helen B	*LAS*	15	*Chicago*
Sawtell, Warren Michel	*Agr Sp*		*Chicago*
Sawyer, Gertrude	*Agr*		*Norborne, Missouri*
Sawyer, Henry Greeley	*ChE*	124	*Monmouth*
Sawyer, Philetus Thomas	*Agr*		*Springfield*
Saxton, Charles Van Keuren	*AE*	24	*Pueblo, Colorado*
Saxton, Harry T	*SS*		*Detroit, Michigan*
Schaefer, Edgar Frederick	*LAS*	69	*Quincy*

Schaefer, Ruth Marian	*HSLAS*	76½	*Urbana*
Schaefer, William Adolph	*LAS*		*Chicago*
Schafer, Hazel	*HSLAS*		*Columbia City, Indiana*
Schafer, Ida Z	*SS*		*Macon*
Schalack, Michael Andrew	*Agr*	58	*Butler, Kentucky*
Schaller, Gilbert Simon	*ME*	75	*Mendota*
Schaulin, George Marvin	*Cer*	85	*Mazon*
Schaumberg, Edward George, Jr.	*A*	54	*St. Louis, Missouri*
Schecht, Max	*LAS*	37	*Brooklyn, New York*
Schecter, Ralph Wendell	*LAS*	63½	*Danville*
Scheele, Donald Charles	*ME*	104	*Elgin*
Scheffer, Wilhelmenia	*LAS*		*Atwood*
Schernekan, William John	*Cer*		*West Salem*
Schetnitz, Hymen	*Bus*	108	*Chicago*
Schickendanz, Louis Herman	*ME*	71	*Chenoa*
Schiesswohl, Philip George	*Bus*	99	*Chicago*
Schiesswohl, Ralph Louis	*Bus*	75	*Chicago*
Schiflin, Arthur Krissler	*ME*		*Chicago*
Schlacks, Henry Valentine	*ME*		*Chicago*
Schlader, Edward Holmes	*REE (SS)*	63½	*Oak Park*
Schleichert, Joseph Louis	*AE*		*Chicago*
Schleifer, Ferdinand John	*Agr*	34	*Nashville*
Schlemm, Robert Max	*Agr*	25	*Chicago*
Schloss, Philip	*LAS*		*Terre Haute, Indiana*
Schlueter, Waldo Lauff	*Bus (SS)*	27	*E. St. Louis*
Schmeltzer, Chauncey Brockway	*CE*		*Manteno*
Schmidt, Karl William	*AE*	99½	*Kansas City, Missouri*
Schmitz, Joseph Oscar	*A*	36	*St. Joseph, Missouri*
Schmitz, Karl Mathias	*Bus*		*Manitowoc, Wisconsin*
Schmidt, Paul Marvin	*SS*	14½	*Earlville*
Schneider, Arthur Charles	*CE*	49	*Galena*
Schneider, Daniel Charles	*ME*	115	*Urbana*
Schneider, Herbert	*Med*		*Chicago*
Schneider, William Henry	*ME*		*Springfield*
Schobinger, Eugene	*MSE (SS)*	112	*Morgan Park*
Schock, Arthur John	*EE*	37	*Tower Hill*
Schoembs, Frank Alvin	*LAS*	33	*Cairo*
Scholl, Raymond Stanley	*Agr*	69	*Crafton, Pennsylvania*
Schoondermark, Nelia Charlotte	*A*		*Chicago*
Schori, Margaret Opal	*SS*	8	*Elmwood*
Schreiber, Louis Henry	*Agr*		*Chicago*
Schreiber, Nathan	*Med*	21	*Chicago*
Schreiner, Harold Cordes	*EE*	26	*River Forest*
Schriner, Emma Ellen	*SS*	25	*Peoria*
Schroeder, Edith Carolyn	*LAS*	84	*Chester*
Schroeder, Paul Louis	*Med*	33	*Nashville*
Schroeppel, Harold Henry	*EE*	37	*Mt. Carroll*
Schucker, Rudolph Wester	*A*	147	*Mt. Carmel*
Schueler, Herbert	*ME (SS)*	54	*La Salle*
Schuette, Otto Theodore	*Agr*	82½	*Chicago*
Schuey, Claude Robert	*SS*	6½	*Marion*
Schuler, Dement	*Bus*		*Dixon*
Schuler, Don Buel	*A*	151	*Wichita, Kansas*
Schuler, Kate	*SS*	14½	*Villa Ridge*
Schultz, Carl Emil	*Med*	33	*Oak Park*
Schultz, Ernest Rudolf	*Agr*	78½	*Daldingen, Russia*
Schulz, Frank J	*Bus*		*Elmwood*
Schulz, John A	*ChE*	36	*Elmwood*
Schumacher, Dixie Howard	*HSLAS*	32	*Rockport, Indiana*
Schutte, William George	*ME*	71	*Marseilles*
Schutz, Marvin Edward	*Agr*		*Hillview*
Schwalm, Katherine	*SS*	6	*Chicago*
Schwarzwalder, Clarence Frank	*AE*		*Elgin*
Schweitzer, Benjamin Cecil	*Bus*		*Mt. Carmel*
Schwing, Edward Albert	*SS*	130	*Peoria*
Scott, Bertha Mary	*Mus sp*		*Berwyn*
Scott, George Eugene	*A*		*Chicago*
Scott, Gerald Russell	*Agr*	33	*Chicago*
Scott, Leota	*SS*		*Russellville, Indiana*
Scott, Lincoln Bain	*Agr (SS)*	84	*Boston, Massachusetts*
Scott, Ralph A	*Agr*	33	*Rock Falls*
Scott, Robert Ashmore	*Agr*	75	*Paris*
Scott, Shirley Edward	*L (SS)*		*Anderson, Indiana*
Scott, Winfield	*Agr sp (SS)*	5½	*Golconda*
Scoville, John Allen	*CE*		*Peoria*
Scroggin, Mildred Alice	*LAS*	99	*Mt. Pulaski*
Scupham, Edward Jefferson	*Agr*		*Homewood*
Seaman, Katherine	*LAS*	103	*Oak Park*
Searles, Donald Kenneth	*LAS*	54	*La Grange*
Seass, Jeanie	*HSAgr*		*Sullivan*
Seavey, Harry Richmond	*EE*		*Momence*
Seay, Paul Hendrix	*Bus*	44½	*Allensville, Kentucky*

Sedgwick, James Howard	*Agr*	*30*	*Peoria*
Seed, Harry Raymond	*Agr*	*61*	*Billett*
Seeglitz, Albert Henry	*LAS*	*35*	*Chicago*
Seeglitz, William O	*LAS*		*Chicago*
Segui, Jack	*SS*	*7*	*Lomaz, Argentina*
Seeley, Robert Mayer	*Bus*	*62*	*Freeport*
Seibel, Glee Page	*SS*	*24½*	*Manlius*
Seidenberg, Nathan Cook	*L (SS)*	*14*	*Peoria*
Seidner, Floyd	*AE*	*51*	*Elkhart, Indiana*
Seifert, Herbert Frank	*LAS*		*Thiensville, Wisconsin*
Seifried, Arthur George	*Agr*	*71*	*Chicago*
Sellards, William Heine	*Agr*	*68*	*Champaign*
Sellner, Edna	*Ch*	*36*	*Quincy*
Selsam, Beulah E	*Bus (SS)*	*107*	*Hagerstown, Maryland*
Selzer, Louis Jacob	*A*		*Evansville, Indiana*
Semple, Arthur Truman	*Agr*	*68½*	*Riverton*
Senbold, Heinrich John	*Agr*		*Huntington, Indiana*
Senneff, George Freeman	*Agr*	*98½*	*Rock Falls*
Sense, Mattie Alice	*HSAgr (SS)*	*40*	*Watseka*
Senseman, Harold Leonard	*AE*	*30*	*Monmouth*
Sexauer, James Monroe	*Agr*		*Belvidere*
Sexauer, Mae Magdalen	*LAS*	*56*	*Belvidere*
Seyfert, Max Charles	*L*		*Circleville, Ohio*
Seymour, Arthur Romeyn, *Ph.D (Univ. Wis.), 1907*	*Mus*		*Urbana*
Seyster, Ernest Wilford	*LAS*	*110*	*Kempton*
Shaddock, Rolla Edward	*Agr*		*Macon*
Shaffer, Orvin Valmont	*SS*	*3*	*Danville*
Shaffer, Randolph Clinton	*REE Sp*	*14*	*Plymouth*
Shaffer, Rolla Flemming	*Agr*	*67½*	*Jefferson*
Shallberg, Rudolph Earll	*LAS*	*30*	*Moline*
Shapiro, Abraham	*ME*		*Chicago*
Shapiro, Jacob	*LAS*		*Chicago*
Shapland, Fern Elizabeth Page	*LAS*		*Saunemin*
Shapley, Ralph	*Agr*		*Rockford*
Sharer, Donald David	*MSE*	*37*	*Decatur*
Sharp, James C	*Agr*	*30*	*Urbana*
Sharp, Lucinda	*HS Agr*		*E. St. Louis*
Sharpe, Alan Freer	*Bus*		*Oak Park*
Sharpe, Henry Rhodes	*Agr Sp*		*Urbana*
Shaw, Mrs. Charlotte Joy	*LAS*		*Urbana*
Shaw, Ellis Marsh	*AE*	*136*	*Rockford*
Shaw, Frederick Wood	*CE*	*36*	*Chicago*
Shaw, Hazel	*Mus*		*Urbana*
Shawl, Ray Iris	*Agr*	*94½*	*Peoria*
Shay, Mary Lucille	*LAS*	*31*	*Decatur*
Sheaff, Robert Phineas	*Agr sp*		*Holcomb*
Shearer, Clinton Philip	*Agr*	*36½*	*Auburn*
Shedden, James William	*CE*		*Chicago*
Sheets, Ancel J	*EE*		*Lawrenceville*
Sheets, Haven McKendree	*Agr*	*28*	*Georgetown*
Sheetz, A Vernon	*Bus*	*69*	*Freeport*
Shelby, Edwin, Jr.	*CE*	*75*	*New Orleans, Louisiana*
Shelby, Francis Haywood	*Bus*	*2*	*Lafayette, Indiana*
Shelden, Walter William	*Bus*	*74*	*Winnebago*
Sheldon, Henry Kellogg	*EE*	*95½*	*Sharpsburg*
Sheldon, Nelson Edward	*AE*		*Rockford*
Shelley, Earl Frank	*CE*	*84*	*Mt. Vernon*
Shelton, Wilma Loy, A. B., 1914	*Lb*		*Terre Haute, Indiana*
Shen, Tszujin Chieh	*LAS*	*30*	*Canton, China*
Sheng, Mung-Chin	*LAS*	*72*	*Kin Kiang, China*
Shepard, Albert Durand	*SS*	*8*	*Brookings, South Dakota*
Shepard, Anna Lucile, A. B. *(University of Iowa),* 1910	*Mus*		*Urbana*
Sheppard, Charles Howard	*CE*	*37*	*Edwardsville*
Sheppard, Martin Anthony	*Med*		*Peoria*
Shere, Welby Cobb	*Agr*		*Farmer City*
Sheridan, Mary Beall	*HSLAS*	*37*	*Sullivan, Indiana*
Sherlock, Anna Fowler	*SS*	*5½*	*Madison, Indiana*
Sherman, Carl Lee	*CE*	*108*	*Sandoval*
Sherrick, John Chauncey	*A*	*111*	*Monmouth*
Shields, Eugene Clifton	*SS*	*108*	*Summum*
Shields, John Erwin	*Agr*	*71*	*Lewiston*
Shields, John P	*AE*	*112*	*Washington, Iowa*
Shilling, Franklin William	*Bus*	*60*	*Decatur*
Shing, Chi Ting	*RCE (SS)*	*27*	*Changsha, China*
Shipman, Mina Pearle	*HSAgr*		*Urbana*
Shively, Walter Scott	*ME*	*110*	*Chicago*
Shoemaker, James Wright	*LAS*	*70*	*Charleston*
Sholem, Jerome	*Bus*	*30*	*Paris*
Shonkwiler, Francis Lucian	*ME*		*Monticello*
Shonle, Horace Abbott	*Ch*	*70*	*Tuscola*
Shonts, Turrill Dean	*Bus (SS)*	*96*	*South Bend, Indiana*

Shook, Charles Harmon	*AE*	78	*Carter, Arkansas*
Shook, Charles Wheeler	*LAS*	105	*W. La Fayette, Indiana*
Shott, Ruth Elma	*HSLAS (SS)*	34	*Urbana*
Shriver, Helen Elizabeth	*HSAgr (SS)*	35	*Champaign*
Shrum, Edmond Jerome	*Agr*		*Valley City, North Dakota*
Shup, Laurence Edgar	*EE*		*Newton*
Shurtleff, Raymond Shryock	*Med*	30	*Cuba*
Shy, Frank Spain	*Bus*		*Olney*
Sidell, Roscoe Roy	*SS*		*Shreve, Ohio*
Siebens, Arthur Robert	*Agr*	104½	*Minonk*
Siebenthal, Maud, A. B.*(Ind. Univ.)* 1906	*Lb*		*Bloomington, Indiana*
Siegel, Isaac	*L*		*Chicago*
Siegmund, Humphreys Oliver	*EE*	47	*St. Louis, Missouri*
Siemens, Anne Blanchard	*LAS*		*Kansas City, Missouri*
Siemens, Webb Mellin	*A*	78	*St. Joseph, Missouri*
Signor, Nelle Marie, A. B., 1912	*Lb*	33	*Urbana*
Silbermann, Oscar Emil	*CE*	72	*Homewood*
Silkman, John Mead	*MnE*	108½	*Baltimore, Maryland*
Silver, Milton Gans	*LAS*	33	*Champaign*
Silverman, Isadore	*Agr*	15½	*Chicago*
Simmons, Guy Andrew, A. M. *(Yale Univ.)* 1907	*SS*		*Conway, Arkansas*
Simmons, Sidney Britain	*Agr*		*Fayettesville, N. C.*
Simmons, Theodore Switzer	*Agr*	66	*St. Charles*
Simms, William Henry	*Agr*	81	*Gibson City*
Simon, Walter Henry	*A*	108	*Quincy*
Simons, Raymond Samuel	*LAS*		*Chicago*
Simons, Rayna De Costa	*Agr*	33½	*Chicago*
Simpson, Earl Bruce	*L*		*Eldorado*
Simpson, John Milton	*MSE*	18	*Vincennes, Indiana*
Simpson, Laurance Packer	*MnE*		*Onawa, Iowa*
Simpson, Luther Franklin	*ME*	37	*Moweaqua*
Simpson, Mary Alice	*Agr*	69¼	*Cincinnati, Ohio*
Simpson, Sebastian Solon	*SS*	22	*Pana*
Simpson, Thomas Moore	*Agr Sp*	34	*Alexis*
Sims, Clarence Edgar	*ChE*	107	*Chicago*
Sims, Delbert Edward	*LAS*	12	*Newton*
Sinclair, Ovid Eugene	*EE*	35½	*Mazon*
Singh, Brij Kishore	*Agr*		*Calcutta, India*
Singh, Charn Jit	*EE (SS)*		*Mastwana, Sangrur, India*
Singleton, James Hubert	*Agr*		*Buckley*
Sipe, Raymond Erwin	*Agr*		*Rochelle*
Sisson, Earl	*Agr*		*Factoryville, Pennsylvania*
Skadden, Harvey F	*A*	134	*Danville*
Skaer, Edwin William	*SS*	8	*New Athens*
Skaggs, Allen Orrin	*L Sp*		*Shipman*
Skelton,Charles Leonard	*Agr*	98	*Urbana*
Skemp, Samuel Charles, Jr.	*Agr*		*Maywood*
Slack, Herbert Lee	*CE*	72	*Chicago*
Slack, William Silas	*EE*		*Salem*
Slade, Frederick Lyman	*Med*		*Washington, D. C.*
Sladek, Robert Bohumie	*Agr*		*Cicero*
Slater, Frank Clifton, A. B., 1914	*L*	34	*Cherry Valley*
Slater, Maynard Elmer	*Agr*	106	*Belvidere*
Slayton, Willis Francis	*Agr*	67	*Tulsa, Oklahoma*
Sleezer, Lucile Burlew	*LAS*	17	*Yorkville*
Sloan, Amelia Marie	*HSAgr*	31	*Champaign*
Sloan, Georgia Ona, A. B. *(Ill. Wesleyan)* 1914	*Lb*		*Bloomington*
Sloan, William Finlay	*Agr (SS)*	64½	*Penville, South Dakota*
Slough, Howard Austin	*SS*	8½	*Abingdon*
Smalley, Louis Arthur	*Bus*	23½	*Litchfield*
Smalley, Robert Claire	*Agr*		*St. Petersburg, Florida*
Smallwood, J P	*Bus*	30	*Decatur*
Smart, Chauncey Harrison	*Agr*	25	*Hinsdale*
Smedley, Mrs. Orah Kimbar	*Mus sp*		*Champaign*
Smiley, Lionel David	*EE*	66	*Woodstock*
Smith, Bryan Arthur	*Med*		*Sullivan*
Smith, Charles Eugene	*CE*	90	*Chicago*
Smith, Clara Mabel	*LAS*	6	*St. Clair, Michigan*
Smith, Clarence Walter	*LAS*	33	*Decatur*
Smith, Dey Bertsch, A. B. *(Miami Univ.)* 1911	*Lb*		*Hamilton, Ohio*
Smith, Edwin Allan	*REE*	67	*Chicago*
Smith, Elizabeth Morree	*Mus*	104	*Urbana*
Smith, Everett William	*Cer*		*Geneva*
Smith, Forest Henry	*EE*		*Libertyville*
Smith, George Leslie	*Agr*	32	*Geneseo*
Smith, George Sanborn	*LAS*	23	*Chicago*
Smith, George Walter	*AE*	103	*Wilber, Nebraska*
Smith, Gladys May	*LAS*	107	*Champaign*
Smith, Glenn Calvin	*Agr*	63	*Cuba*
Smith, Glenn Collins	*Agr*	31	*Greenfield*

Smith, Harry Curtis	*MSE*	*31*	*Monroe, Iowa*
Smith, Harvey John	*MnE*		*Louisville, Kentucky*
Smith, Hawley Lester	*MnE*	*15½*	*Clifton*
Smith, Herbert Edgar	*LAS*	*86*	*Ontario, Canada*
Smith, Hubert Argo	*A*	*66*	*Urbana*
Smith, Irene Fern	*Ch (SS)*	*86*	*Red Bud*
Smith, Irene Suzana	*SS*		*Maywood, Pennsylvania*
Smith, Jacob Allen	*LAS*		*Altoona, Pennsylvania*
Smith, Jesse Parker	*Cer*		*Depue*
Smith, John Wesley	*ME*	*36*	*Geneseo*
Smith, Julian Francis	*Ch*	*72*	*Champaign*
Smith, Kenneth	*LAS*		*Chicago*
Smith, Leonidas Logan	*A*		*Effingham*
Smith, Luella Leilla	*Mus*	*24*	*Byron*
Smith, Marshall	*SS*	*8*	*Decatur*
Smith, Marshall Coughenour	*Agr*		*Jeffersonville*
Smith, Mary Magdalene	*SS*		*Crookston, Minnesota*
Smith, Mary Parnell	*HSAgr*	*44*	*Cuba*
Smith, Merle Le Roy	*LAS*	*45½*	*Freeport*
Smith, Paul Miller	*Agr*	*109*	*Lincoln*
Smith, Philip	*A*		*Austin, Minnesota*
Smith, Ralph Lindon	*LAS*		*Bellflower*
Smith, Raymond Charles	*Agr*		*Amboy*
Smith, Robert Harold	*MSE*	*18*	*Wauwatosa, Wisconsin*
Smith, Royal Lee	*Cer*	*56*	*Toledo, Ohio*
Smith, Sidney Hillard	*Bus*	*17½*	*Freeport*
Smith, Stewart Tracey	*AE*	*112*	*Rose Hill, Iowa*
Smith, Theodore Hammond	*Med*		*Godfrey*
Smith, Valda Eveline	*HSLAS*		*Geneseo*
Smith, Wilhelma Zoe	*LAS*	*67*	*Champaign*
Smohl, Barbara Belle	*LAS*	*31*	*Vandalia*
Smoot, Elizabeth Ellice	*Mus*	*105*	*Fithian*
Smoot, William Everett	*Agr*	*28*	*Petersburg*
Snell, Clarence Eastlake	*Bus*		*Oak Park*
Snell, Harry Stirling	*ChE*		*Oak Park*
Snoddy, Raymond Leffel	*LAS*	*79*	*Danville*
Snook, Earl William	*Agr*		*Ottawa*
Snook, Helen Carpenter	*Mus*		*Boswell, Indiana*
Snook, John Donald	*ChE*	*115*	*Boswell, Indiana*
Snyder, George	*CerE*		*Altoona, Pennsylvania*
Snyder, Glenn	*Agr*	*63½*	*Billett*
Snyder, John Francis	*Agr*		*Billett*
Soderberg, Harry	*AE (SS)*	*41*	*Florence, Wisconsin*
Soenksen, Paul William	*Bus*		*Harvey*
Somers, Aloysius Joseph	*Agr*		*Kankakee*
Somers, Francis Patrick	*ChE*		*Kankakee*
Sorenson, Alfred	*Agr (SS)*	*68*	*Cameron*
Sortwell, Harold Haynes	*CerE*		*Indianapolis, Indiana*
de Souza, Jacy Tollentino	*EE*		*San Francisco, California*
Soto, Rafael Arcangel, B. S., 1912	*LAS (SS)*		*Sabana Grande, Porto Rico*
Sowers, Gordon Alfered	*Agr*		*Kingman, Indiana*
Spalding, Marjorie Mae	*Mus*	*30*	*Champaign*
Spangler, Charles Foskey	*Bus*	*22*	*Amboy*
Spear, Harry George	*SS*	*25*	*Rankin*
Spencer, Cynthia Eugenia	*LAS (SS)*	*26*	*Champaign*
Spencer, Mary Ethel	*LAS*	*56*	*Champaign*
Spencer, Ralph William	*Agr*		*Lawrenceville*
Spencer, Victor Elwin	*Agr*	*102½*	*Lockport*
Sperry, Ralph	*Bus*		*Macomb*
Spink, Philip Marion	*Bus*		*Chicago*
Spitz, Milton Joseph	*ChE*	*28⅓*	*Chicago*
Sprague, Norman Ellsworth	*CE*		*Piqua, Ohio*
Sproull, Raymond Arthur	*LAS*	*30*	*Mazon*
Sprowls, Luna Lenore	*SS*	*91½*	*Gibson City*
Squibb, Reginald Gardiner	*ChE (SS)*	*21*	*Chicago*
Squier, George Kasson	*ME*	*64*	*Rockford*
Stafford, Louis Daniel	*Agr*		*Harvard*
Stahl, Walter Andrew	*ME*	*82*	*Chicago*
Stall, Willis Preston	*Agr*	*32*	*Champaign*
Stamas, Theodore Albert	*LAS*		*La Grange*
Stanfield, William Wesley	*SS*	*10½*	*Manhattan, Kansas*
Stangel, Victor	*LAS*	*12*	*Champaign*
Stanley, Leon	*Agr*	*27½*	*Downers Grove*
Stanley, Walter	*Bus*	*30*	*Anderson, Indiana*
Stants, Bess Edna	*LAS*	*35*	*Oblong*
Stapler, William W	*ChE*	*102*	*Wilmington, Delaware*
Staples, Alexander Dale	*ReE*		*South Bend, Indiana*
Staples, John Forest	*Agr*		*South Bend, Indiana*
Stark, John Edwin	*LAS (SS)*	*89*	*Urbana*
Starkel, Charles Leslie	*LAS*		*Belleville*
Starkey, Albert Lyle	*SS*	*53½*	*Pesotum*
Starner, Verner	*Ch*	*64*	*Carlisle, Indiana*
Starrett, David Burnham	*Agr*	*28½*	*Elgin*
States, Mary Louise	*LAS*		*Urbana*

Stauder, Edward P	*EE*	*13*	*St. Louis, Missouri*
Stebbins, Selden Lewis	*LAS*	*121*	*Chicago*
Steele, Mead Irving	*LAS*		*Edwardsville*
Steenburg, Walter Carlyle	*Agr*		*Farmington*
Stein, Bertha Marie	*HSLAS*		*Blue Island*
Steinbreder, William John	*SS*	*152½*	*St. Louis, Missouri*
Steinhoff, Carl Ferdinand	*Med*	*37*	*Chicago*
Steinmayer, Alwin Gustave	*EE*	*7¼*	*La Salle*
Steinmayer, Reinhard A J	*Cer*	*6¼*	*La Salle*
Steinmetz, Ferdinand Henry	*Agr (SS)*	*162½*	*Edwardsville*
Steinmeyer, Herbert A	*Bus*		*St. Louis, Missouri*
Stene, Ole	*ChE*	*59½*	*Elgin*
Stensel, Harlow	*EE*		*Farmer City*
Stephens, Mary Ethel	*HSAgr*		*Urbana*
Stephens, Thomas Earl	*Agr*	*31*	*Champaign*
Stephens, William	*EE*		*Champaign*
Stephenson, Edward	*LAS*	*21*	*Kalamazoo, Michigan*
Stephenson, Juanita Alice	*HSAgr*		*Sparta*
Stephenson, Marvin Schutte	*A*	*33*	*Green Bay Wisconsin*
Stern, Jay Lavenson	*Agr (SS)*	*92*	*E. Las Vegas, New Mexico*
Sternberg, Bert Ludens	*Agr*	*98*	*Fulton*
Sterling, Frank Hugo	*Agr sp*	*30½*	*Bloomington*
Stevens, Edith Hasseltine	*HSAgr*	*37*	*St. Louis, Missouri*
Stevens, Mrs. Adeline Chapman	*LAS*		*Marietta, Ohio*
Stevens, Helen Gordon	*LAS*	*31*	*St. Louis, Missouri*
Stevens, Marie Felicia	*HSLAS*		*St. Louis, Missouri*
Stevens, Robert Gardiner	*ME*		*Chicago*
Stevens, Vernon Thompson	*L*		*Corpus Christi, Texas*
Stevens, Wentworth Holt	*Agr*		*Urbana*
Stevens, William Corley	*SS*	*78*	*Marshall*
Stevenson, Ailsie Miller	*HSAgr*	*32*	*Peoria*
Stevenson, Edward Hiel	*Agr*	*3¼*	*Elvaston*
Stevenson, Fred Luther	*AE*		*Galesburg*
Stevenson, George Augustus	*Med (SS)*	*81*	*Harvey*
Stewart, Earle Henry	*ME*	*110*	*St. Louis, Missouri*
Stewart, Edward Paul	*LAS*		*Harvey*
Stewart, Frank	*Med (SS)*	*30*	*Champaign*
Stice, Henry Sylvester	*LAS (SS)*	*102*	*Urbana*
Stice, Kenneth Seymour	*Cer*	*7¼*	*Urbana*
Stickler, Charles Arthur	*Agr (SS)*	*38*	*Canton*
Stiegemeyer, Clara	*LAS*		*St. Louis, Missouri*
Stiles, Le Roy Christie	*Bus*	*32*	*Oak Park*
Stillwell, Helen	*LAS*	*33*	*Urbana*
Stinson, Ira S	*MSE*	*107*	*Champaign*
Stinson, Mary Edna, A.B. *(Western Coll. for Women)* 1909	*SS*	*7*	*Champaign*
Stinson, Rita	*HSAgr (SS)*	*63½*	*Champaign*
Stipp, Blanche	*Mus*	*103*	*Champaign*
Stiritz, Benjamin Andrew	*Agr*		*Murphysboro*
Stirton, James Crear	*CE*	*78*	*Chicago*
Stitt, Raymond DeVries	*EE*	*132*	*Chicago*
Stockdale, Thomas Elmer	*CE*	*36*	*Chicago*
Stocker, Harry Frederick	*CE*	*75*	*Highland*
Stoddard, George Wellington	*AE*	*35*	*Milwaukee, Wisconsin*
Stoddard, Mabel Frances	*LAS*	*43*	*Washington, D. C.*
Stoffel, Clarence Milton	*CE*	*105½*	*St. Louis, Missouri*
Stoll, Laura Louise	*LAS*	*9*	*Chicago Heights*
Stoltey, Ethel Lynette	*LAS*		*Urbana*
Stone, Albert Getten	*AE*	*79*	*Chicago*
Stone, Charles Holmes, A.M. *(Univ. of Georgia)* 1913	*Lb*	*8*	*Athens, Georgia*
Stone, Ruth Elizabeth	*SS*		*Newman*
Stopp, Gerald Darfield	*LAS*	*99*	*Plainfield*
Storer, Esther Susie	*LAS*		*Centralia*
Storey, F Stanley	*Bus*		*Rockford*
Stout, Earl Boyd	*ME*	*110*	*Elgin*
Stoutenborough, George	*Bus*		*Maroa*
Stoutzenberg, Florence Thomas	*HSAgr*	*51*	*Greenville*
Stover, Earl Bertram	*EE*		*Oak Park*
Straight, Merton Taunor	*Agr*	*20*	*Fonda, Iowa*
Strang, Robert Leon	*Agr*	*102*	*Antioch*
Strathern, N Grant	*Bus*		*Chicago*
Stratton, Bernice Elizabeth	*HSLAS*	*48*	*Chicago*
Straub, Ernest J	*SS*	*5*	*Kansas City, Missouri*
Straub, Walter Fred	*ChE*		*Chicago*
Strawbridge, Ernest Thomas	*SS*	*2½*	*Danville*
Strawn, Robert Emerson	*Agr sp*		*Pleasant Plains*
Streat, Consuela Elvira	*HSLAS*		*Belleville*
Streed, Felix Lewis	*CE*		*Waukegan*
Strehlke, Albert LaPool	*LAS*		*Meeker, Colorado*
Stretch, Lenna	*Bus*		*New Castle, Indiana*
Strickland, Ray Malcolm	*Agr*	*81*	*Urbana*
Stringer, Joseph Kenneth	*Bus*	*23½*	*Dubuque, Iowa*

Stroheker, Frank Sewall	*L*	*11*	*Barry*
Strong, James Kibbe	*Agr*	*30*	*Keithsburg*
Strong, Jesse Woodford	*Agr*		*Canton*
Strong, Robert Ambrose	*MnE (SS)*	*125½*	*South Bend, Indiana*
Strong, Truman Jefferson	*A*	*62½*	*Spokane, Washington*
Strong, William Augustus, A.B., 1914	*Agr*		*Joliet*
Strouse, Lena	*SS*		*Ipava*
Strubinger, Loraine Clarence	*Bus*		*Barry*
Struever, Carl Chester	*Ch*		*Peru*
Stubblefield, Ansel Fifer	*Agr sp*		*McLean*
Stubblefield, Buford Matthews	*Ch (SS)*	*106½*	*Bloomington*
Stubenrauch, Edgar Albert	*AE*		*Sheboygan, Wisconsin*
Stumpf, Elmer Henry	*Bus*	*59*	*Chicago*
Sturm, Clark Henry	*EE*		*Elgin*
Sullivan, Nicholas Cyril	*SS*	*64*	*Chicago*
Summers, Abel Ross	*EE*	*133⅓*	*Champaign*
Sun, Eu-lin	*Agr*		*Washington, D. C.*
Sundell, Roy Dehm	*ME*	*71*	*Oneida*
Sunny, Arthur Edward	*LAS*	*11½*	*Chicago*
Suppes, Elsie Mabel	*LAS*	*22*	*Somonauk*
Supple, Winifred May	*HSAgr*	*29*	*Deerfield*
Sutcliffe, Constance	*LAS*		*Urbana*
Sutcliffe, Dorothy	*LAS (SS)*	*40*	*Urbana*
Sutcliffe, Marjorie	*HSLAS (SS)*	*91½*	*Urbana*
Sutherland, Robert James	*Bus*	*60*	*Platteville, Wisconsin*
Sutherland, Wilbor Mills	*Agr*	*69*	*McNabb*
Sutton, Frank Howard	*Bus (SS)*	*64½*	*Chicago*
Sutton, Nora	*LAS*		*Oakland*
Sutton, William Henry	*LAS*	*24*	*Washington, D. C.*
Swaim, Earle Frank	*LAS*		*Fithian*
Swaim, Donald Tyler	*Bus*	*29*	*Danville*
Swam, Harry Clifford	*Agr*	*32*	*Hallville*
Swanberg, Edmund De Forest	*EE*		*Worthington, Minnesota*
Swanberg, Mariou Goerz	*HSLAS*		*Chicago*
Swank, Edith Ann	*LAS*	*100½*	*Houston, Texas*
Swanson, Frances Eleanor	*LAS*	*56*	*Urbana*
Swanson, Norvid Raymond	*Agr*	*70*	*St. Charles*
Swanson, Ralph Arthur	*Cer*	*31*	*Streator*
Swanson, William August	*CE*	*61*	*Chicago*
Swartwout, Edgar Chessman	*Agr*	*66*	*Elgin*
Swartz, Fay Wood	*Mus*	*33*	*Urbana*
Swartz, Leon Frank	*Agr (SS)*	*91*	*Urbana*
Swearingen, Clara	*SS*		*Champaign*
Sweeney, Arthur Frantz	*Bus*		*Chicago*
Sweeny, Perry Jerome	*EE*	*110*	*Caledonia*
Sweet, Orville Roberts	*Agr*		*Sherman*
Sweney, Merle Arthur	*LAS*		*Prairie City*
Swengel, Lloyd Raymond	*SS*	*7*	*Neoga*
Swenson, Carl Elmer	*ME*	*50*	*Chicago*
Swett, Lewis Wentworth	*EE*	*67*	*Springfield*
Swick, Curvella H	*Bus*	*32½*	*Galton*
Swick, Mary Ethel	*LAS*	*98*	*Urbana*
Swick, Nellie May	*LAS*	*60*	*Urbana*
Swickard, Niza Ethel	*SS*	*7½*	*Newman*
Swift, Gertrude Lucie	*LAS*		*Streator*
Swigart, Alta Caroline, A.B., 1910	*Lb*	*26*	*Champaign*
Swigart, Blanche Belle	*SS*	*48*	*Rapatee*
Swigart, Faith Gretchen	*LAS*	*32*	*Champaign*
Swindler, Henry	*LAS*		*Magnolia*
Swindler, Rollin Leland	*Agr*	*34*	*Magnolia*
Switz, Marquerite Maud	*LAS*	*68*	*Terre Haute, Indiana*
Swope, Russel Claude	*Bus*	*106*	*Kankakee*
Swormstedt, Leroy	*ME*		*Lockland, Ohio*
Taggart, Clementine	*LAS*	*66*	*Wooster, Ohio*
Taggart, John Finley	*Agr*	*32*	*Wooster, Ohio*
Taketa, Shiro	*EE*	*95*	*Hiroshima, Japan*
Talhert, Harold Arthur	*Bus*	*100*	*Garrett, Indiana*
Talbot, Rachel Harriet	*LAS*		*Urbana*
Tanner, Rudolph Harrison	*Agr*		*Kankakee*
Tanner, Thomas Sheridan	*AE*	*63*	*Dwight*
Tanton, Glenwood Charles	*Agr*	*14½*	*Washington*
Tapping, Charles Hawley	*AE*	*126*	*Peoria*
Tarnoski, Alexander Stephen	*AE*	*127½*	*Chicago*
Tate, James Alfred, B.S., 1914	*SS*	*7*	*La Junta, Colorado*
Tatsch, Walter Karl	*CE*		*Chicago*
Taulbee, Horton Mills	*CE*		*Hillsboro*
Taylor, Charles Bagwell	*CE*	*36*	*Manistee, Michigan*
Taylor, Edwin George	*Bus*	*57*	*Burlington, Iowa*
Taylor, Grace DeEtte	*HSAgr*	*23*	*West Plains, Missouri*
Taylor, Harold Albert	*Agr*		*Chicago*
Taylor, Heber Charles	*SS*	*14½*	*Charleston*
Taylor, Inglis Mitchell	*Ch*		*Harrisburg*
Taylor, Laurence Righter	*LAS*		*Indianapolis, Indiana*

Taylor, Lilian Catherine	*HSAgr*	*124*	*Negaunee, Michigan*
Taylor, Max	*LAS*	*35*	*Pryor, Oklahoma*
Taylor, Milo Cornelius	*CE*	*125*	*Champaign*
Taylor, Norris Onslow	*ChE*		*Geneseo*
Taylor, Roy H	*Agr*		*Bismarck*
Taylor, Roxie Lelah	*SS*	*6*	*Battle Ground, Indiana*
Taylor, Thomas C	*Agr*		*West Plains, Missouri*
Taylor, Townsend John	*SS*	*45½*	*Owensboro, Kentucky*
Taylor, William Mitchell	*Agr*	*89*	*Champaign*
Teasdale, John Warren	*A*	*36*	*St. Louis, Missouri*
Teeters, Boyd Samuel	*EE*		*Tekonsha, Michigan*
Teeters, Mary Etta	*HSLAS*	*30*	*Auburn, Indiana*
Teets, Robert Jason	*EE*		*Wyoming*
Teixeira, Emilio Alves	*MnE*	*58½*	*Cassia, Brazil*
Tendick, Frank Hulit	*ChE*	*69*	*Canton*
Tener, Emilie Randall	*HSLAS*	*29*	*Cleveland, Ohio*
Tener, Katherine Randall	*LAS*	*35*	*Cleveland, Ohio*
Ten Eyck, Lloyd Ellis	*Agr*	*33⅔*	*Rockford*
Terril, Clarence Thomas	*L*	*54*	*Champaign*
Terry, Robert Isaac	*Agr*	*53*	*Indianapolis, Indiana*
Teter, Harry Arthur	*Med*		*Chicago*
Thal, Olga Elizabeth	*LAS (SS)*	*74*	*Champaign*
Thatcher, De Witt Wesley	*Agr*	*95*	*St. Charles*
Thatcher, Frederick Robert	*EE*	*32*	*Elgin*
Thiele, Ross Henry	*A*	*47*	*Ramsey*
Thieleman, William Carl	*CE*		*Chicago*
Thies, Walter Fred	*Bus*		*St. Louis, Missouri*
Thom, James Dale	*LAS*	*99*	*Sioux City, Iowa*
Thomas, Abner Royce	*Agr*	*70*	*Big Rock*
Thomas, Charles Fredrick	*Med*	*67*	*Argenta*
Thomas, Clair Joel	*Agr*	*76*	*La Harpe*
Thomas, Eliza	*SS*		*Weldon*
Thomas, Glen Herbert	*A*	*55*	*Waterville, Kansas*
Thomas, Harry A	*Agr*		*Rockford*
Thomas, Joe Lee, A.B., *(Lake Forest Coll.)* 1912	*Agr*	*118*	*Champaign*
Thomas, James William	*Bus*		*Anna*
Thomas, Maurice Loyd	*EE (SS)*	*68*	*St .Louis, Missouri*
Thomas, Polly Elizabeth	*HSLAS (SS)*	*66*	*Big Rock*
Thomas, Ralph Raymond	*EE*	*79*	*St. Louis, Missouri*
Thomas, Robert Ellsworth	*CE*	*119*	*Rockford*
Thomas, Stanley Jeremiah	*MSE*	*85*	*Vincennes, Indiana*
Thompson, Everett Bragg	*LAS*	*17*	*Tuscola*
Thompson, Fleta	*HSLAS*		*Carrier Mills*
Thompson, Francis	*SS*	*135*	*Pinckneyville*
Thompson, Fred Leo	*LAS*		*Garrett*
Thompson, George S	*Bus*	*30*	*Kankakee*
Thompson, James Arthur, B.S., 1905	*Agr*		*Rushville*
Thompson, Lillian Maud	*HSLAS*	*94*	*Chicago*
Thompson, Orlando Stephen	*Agr*	*32*	*Harvey*
Thompson, Russell Hopkins	*Bus*	*33*	*Sullivan, Indiana*
Thomsen, Marvin William	*Bus*	*17*	*Fulton*
Thomson, Lillian Euphemia	*LAS*		*Creston, Iowa*
Thor, Alfred Ulmo	*Agr sp*		*Rollo*
Thorndike Clara Louise	*HSLAS*	*100*	*Austin*
Thorne, Charles Thomas, Jr.	*Agr sp*		*Spencer, Indiana*
Thorne, Frank Hilton	*Agr*	*87½*	*Berwyn*
Thorne, Laurence Emerson	*Agr*	*104*	*Huntington, Indiana*
Thornsburgh, Zada Goff	*LAS*		*Urbana*
Thorp, Veta	*LAS*	*40*	*Clinton*
Thorud, Bert Marshall	*AE*	*2*	*Chicago*
Threlkeld, James Graydon	*Agr*		*Decatur*
Thurlow, Henry Plummer	*Agr*	*34½*	*Lynn, Massachusetts*
Thurston, Alfred William	*Agr*	*23*	*Champaign*
Thurston, Estelle Lenore	*LAS (SS)*	*113*	*Terre Haute, Indiana*
Thurston, Henry Winfred, Jr.	*Agr*	*99½*	*New Milford, New Jersey*
Ticknor, James Hotchkiss	*AE*	*63½*	*Peoria*
Tiffany, Herbert Chassee	*Agr*		*La Grange*
Tiffin, Joseph Dow	*Agr*		*Walshville*
Tiley, Pearl May	*SS*	*4*	*Belleville*
Tillotson, Ella	*LAS*	*81*	*Roswell, New Mexico*
Tillson, Arthur Edward	*ChE*	*58*	*Naperville*
Tillson, Vivian Earle	*Ch*		*Naperville*
Tilton, James Frederic	*Agr*		*Hoopeston*
Tilton, Leon Deming	*Agr*	*111*	*E. St. Louis*
Tilton, Walter Joseph	*Ch*	*62*	*Fairmont*
Timmerman, Frederic Harris	*Agr*		*Champaign*
Tinkey, Guy Henry	*ME*		*Decatur*
Tinkey, Otto George	*EE*	*70*	*Decatur*
Tipple, Ruth	*SS*		*Payson*
Todd, Ethel	*LAS*	*96*	*La Harpe*
Todd, Robert Ivan	*Agr*		*Michigan City, Indiana*
Todd, Malcolm Newton	*SS*	*137½*	*Tunnelton, Indiana*

Tokuiyama, Sotaro	*Ch*	77	*Shiznoka, Japan*
Tolmie, Thomas William	*AE*	51	*Manchester, Iowa*
Tombaugh, Glen Deah	*Agr*		*Pontiac*
Tomlin, Edwin Thomas	*Agr sp*		*Springfield*
Tomlin, Harry Capps	*Agr sp*		*Pleasant Plains*
Tompkins, Elmer Judson	*SS*	39	*Eagle Grove, Iowa*
Tompkins, Ralph Hawthorne	*LAS*		*Eagle Grove, Iowa*
Thompkins, Roy Woodruff	*CerE*	10	*Joliet*
Tong, Teh-Chang Yee Cheng	*Bus (SS)*	15	*Yung Chow Foo, China*
Torian, Robert C	*Bus*	5	*Evansville, Indiana*
Tornquist, Alpha Caroline	*HSLAS (SS)*	58	*Champaign*
Torrence, Howard John., A.B. *(Monmouth Coll.)* 1910	*SS*		*Monmouth*
Tower, Alexander McJunkin	*REE*	30	*Ft. Wayne, Indiana*
Tower, Carleton Myron	*Bus*		*Beloit, Wisconsin*
Townsan, George Leland	*AE*		*Urbana*
Towson, Irene	*LAS*	102	*Macon*
Tracy, Elizabeth Lail	*HSLAS*	63	*Anderson, Indiana*
Tracy, Paul Hubert	*Agr*		*Paris*
Trapp, Edwin Stewart	*AE*		*Des Moines, Iowa*
Traxler, Elinor Evangeline	*LAS*		*Urbana*
Trakler, Ivan W	*Agr*		*Urbana*
Treat, Gladys Annie	*SS*	8	*Oberlin, Ohio*
Tredup, Walter Edward	*Bus*		*Chicago*
Treischel, Chester	*Cer*	63	*Kankakee*
Trelease, Sidney Briggs	*Bus (SS)*	33	*Urbana*
Trevelyan, Helen Elizabeth	*SS*	23½	*Chicago*
Trickle, Lenox Edmond	*AE*		*Rantoul*
Tritt, Francis Irene	*HSLAS*	98	*Pontiac*
Troeger, Philip Theodore	*Agr*	69	*Storm Lake, Iowa*
Trost, Opal Winifred	*HSAgr*	66	*Urbana*
Troster, Marion Collier	*Med*		*Bellflower*
Troster, Oliver John	*Agr (SS)*	60½	*Bellflower*
Trout, Clement Eddy	*Agr (SS)*	41	*Urbana*
Troutman, Mary Elizabeth	*SS*	7	*Charleston*
Troutman, William Chilton	*SS*	9	*Carl Junction, Missouri*
Trowbridge, Charles Edgar	*MSE*	91	*South Bend, Indiana*
Trowbridge, Charles Leslie	*Agr*	99½	*Crete*
Trowbridge, Mary Luella	*LAS*	97	*Green Valley*
Trowbridge, William Oliver	*Agr*		*South Bend, Indiana*
Troxel, Floyd Eisworth	*ME*	75	*Minonk*
Troy, Mary Zeliaette, A.B. *(Univ. of Alabama)* 1912	*Lb*	47	*Tuscaloosa, Alabama*
Truman, Edna, B.S., 1907	*SS*		*Urbana*
Trumbo, Silas Max	*AE*	78	*Pontiac*
Tsao, John Mou Chuan	*SS*	21	*Hong Kong, China*
Tschentke, Herman Louis	*SS*	7½	*Crescent City*
Tsen, Bei Chang	*CE (SS)*	37	*Ling Young, China*
Tu, Ching Fang	*MnE*		*Kirin, China*
Tucker, Lawrence Edward	*SS*	8	*Greencastle, Indiana*
Tucker, Rolland Henry	*Agr*		*Minonk*
Tuell, Wallace Gerry	*EE*	48	*Canton*
Tukey, Harold Bradford	*Agr*		*Berwyn*
Tupper, James Oliver	*Agr*	71½	*Woodstock*
Turlay, Anna Marie	*LAS*	104½	*Clinton*
Turley, Harold Edwin	*Agr*		*Burney, Indiana*
Turnbull, Ida Caroline	*SS*		*Carlinville*
Turner, Charles Edward	*LAS*	35	*Mt. Sterling*
Turner, Chester Charles	*Agr*	34	*Champaign*
Turner, Hazel May	*HSLAS*		*Richmond*
Turner, James Craigmile	*Agr*		*Loda*
Turner, Luther Martin	*EE*	37	*Beardstown*
Turnquist, Ivan William	*Agr*		*Chicago*
Tuthill, James Pierce	*CE*	27	*Elgin*
Tuttle, Coy Rathbone	*Agr*	10	*McLean*
Tuttle, Lowel Hafner	*Agr*	34	*Oak Park*
Tyhurst, Ora Everett	*Agr*		*Martinville*
Tyler, James Hersey	*CE*	39	*Charleston*
Tylski, Walter William	*ME*	33	*Chicago*
Underwood, Eugene	*LAS*		*Chicago*
Unger, George Walter Adolph	*A*		*Oak Park*
Uphaus, Bruce Richard	*ME*	111	*Chicago*
Urbain, Lottie Octavia	*HSLAS*	81	*Du Quoin*
Usis, Felix Max	*EE*	10	*Niles*
Utley, Nelson Monroe	*Bus*		*Chicago*
Utt, Arthur Holliday	*ChE*		*Springfield*
Utter, Henry Benjamin	*AE*	14	*Missoula, Montana*
Valentine, George Snow	*Bus*		*Evanston*
von Valtier, Ralph Paul	*ME*	75	*Chicago*
Van Cleave, Bruce	*LAS*	31	*Springfield*
Van Cleave, Charles McCabe	*SS*	30	*Olney*
Van Cleve, Wallace	*Agr*		*Springfield*
Van Dam, Ernest	*SS*	5½	*Ludlow*

Vander Mark, Walter Joseph	*ChE*		*Champaign*
Vandaveer, Harriet	*SS*		*Greenfield*
Vanden Boom, Gerry Christopher	*ME (SS)*	74	*Quincy*
Van Densen, Arthur Stowe, Jr.	*LAS*		*Evanston*
Van Doren, Theodore Joseph	*LAS*		*Springfield*
Van Dyke, Earl Henry	*Agr*	34	*Plainfield*
Van Frank, Elliott Dudley	*A*	66½	*Danville*
Van Meter, Craig	*LAS*	33	*Mattoon*
Van Natter, Francis Marion	*LAS*	65	*Muncie, Indiana*
Vanneman, Mrs. Harry Walter	*SS*		*Urbana*
Vanneman, Russel William	*Bus*		*Urbana*
Vansant, Rodman Fleming	*Agr (SS)*	59	*Chicago*
Vansant, William Laurence	*ME*	108	*Chicago*
Van Sickler, John Russel	*CE*		*Roanoke, Virginia*
Van Winkle, Paul Keith	*Bus*	29	*Chicago*
Van Winkle, Stephen Niel	*A*		*Henderson, Kentucky*
Varner, Joe Woodyard	*Agr*		*Paris*
Vaughan, Fred Nathan, Jr.	*Agr*		*Amboy*
Vaughan, Glenn Poland	*Bus (SS)*	97⅓	*Amboy*
Vaughan, John Edward	*LAS sp*		*Little Rock, Arkansas*
Vaughan, Robert Edward	*SS*		*Crawfordsville, Indiana*
Vaughn, Emerson	*Agr*		*St. Louis, Missouri*
Vaughn, Howard Flaghn	*A*		*Urbana*
Vaughn, Myra	*HSLAS*	62	*Urbana*
Vear, Leonard Ray	*Agr*		*Chicago*
Veirs, Willard Lewis	*Med*		*Urbana*
Velde, Henry Richard	*Agr*		*Pekin*
Velde, Karl Everett	*Bus*	49	*Pekin*
Vernon, Maris Hurford	*CE*	37	*Moline*
Vial, Harold Craigmile	*Agr*		*La Grange*
Vibelius, Siegfred Nathaniel	*A*	73	*Joliet*
Vining, Robert Jefferson	*Agr*		*Kankakee*
Vissering, Elkhart Bernhard	*LAS*		*Minonk*
Voeks, Forrest	*Bus*		*Rockford*
Vogele, Alfred Charles	*Agr*		*Assumption*
Volk, Alven Claude	*CE (SS)*	75½	*St. Louis, Missouri*
Volk, William Joseph	*CE*		*Chicago*
Volstorff, Fred Albert	*ME*		*Elgin*
von Voltier, Ralph Paul	*ME*		*Chicago*
Voorhees, Lawrence Elmer	*LAS*	71	*Alton*
Voorhees, Vandevere	*CE*		*Alton*
Vopicka, Fred Frank	*AE*	39	*Chicago*
Vorwald, Edmund	*Agr*		*Edwardsville*
Voss, Anna	*Mus*	25	*Champaign*
Vovesny, Joseph Paul	*Med*		*Chicago*
Vroom, Quimby	*Bus*		*Mason City, Iowa*
Waddington, Glenn George	*ME*	37	*Dewey*
Wadleigh, Theodore	*Agr*		*Herscher*
Waggoner, Karl Marshall	*A*	39	*Decatur*
Wagner, Alexander	*Bus*	100	*Chicago*
Wagner, Charles Arthur, Jr.	*EE*		*Springfield, Missouri*
Wagner, Ernst Harrison	*SS*	8	*Ashton*
Wagner, George William	*ME*		*Peoria*
Wagner, Kenneth	*AE*		*Belleville*
Wagner, Ralph Russell	*Cer*	68	*Pontiac*
Wagner, William Andrew	*CE*	108	*Champaign*
Wagstaff, Charles Dudley	*Agr*		*Fiston, Indiana*
Wahlin, Vendla, A.B. *(Bethany Coll.)* 1913	*Lb*		*Lindsborg, Kansas*
Wainwright, James Butler	*ME*	110	*Winchester*
Wakefield, George Mincke	*CE (SS)*	49	*Alma*
Wakeland, Fred Raymond	*Agr*		*Hoopeston*
Wakeland, Guy Earl	*Agr*	30	*Hoopeston*
Wakeley, John Everett	*SS*		*Danville*
Waldo, John Hardenbergh	*SS*	3	*Champaign*
Wales, Frank Spear	*Agr*		*Polo*
Walker, Carle Capron	*Agr*	107½	*Clinton*
Walker, Frank Abram	*Agr*	27	*Aurora*
Walker, George William	*Agr*	69	*Mackinaw*
Walker, Helen	*HSLAS*		*Clinton*
Walker, Jennie Grace	*SS*	8½	*Cicero*
Walker, John Sawyer	*A*	103	*Aurora*
Walker, Mae Ella	*HSLAS*		*Aurora*
Walker, Nelle	*LAS*		*Carterville*
Walker, Stanton	*CE*	37	*Champaign*
Walkerly, Dorothy Keziah	*Bus (SS)*	105	*Urbana*
Walkerly, Margaret Magdalene	*Bus*	26½	*Urbana*
Wallace, Edgar Dearborn	*Bus (SS)*	67	*Chicago*
Wallace, Lewis Bryant	*Bus*	52	*Homer*
Wallace, Paul Samuel	*EE*		*Savanna*
Wallage, Stanley Tiffin	*SS*	121	*Paris*
Waller, Richard Valentine	*LAS*	67½	*Elkhart, Indiana*
Wallis, Edward	*Agr sp*		*Urbana*
Walmer, Joseph Charles	*Bus*	32	*Cairo*

Walraven, Wesley Burnham	*CE*	*74*	*Centralia*
Walser, Frank Emil	*LAS*	*142¼*	*New York City*
Walser, Stephen Albert	*Agr*	*49*	*Brooklyn, New York*
Walsh, Earl Joseph	*AE*		*Kankakee*
Walsh, Edward John	*LAS*		*Herscher*
Walsh, John Edward	*EE*	*60*	*Peoria*
Walsh, Leo Bernard	*Agr*	*34*	*Rantoul*
Walters, Harvey Henry	*A*	*122*	*Beach, North Dakota*
Walters, Linzy Ellsworth	*SS*	*10*	*Newark, Ohio*
Walters, Prentice Therman	*LAS*	*36⅓*	*Macomb*
Walton, Albert Malcolm	*SS*	*9*	*Browns*
Walton, Howard Roberts	*Bus*	*31*	*Champaign*
Walton, James Kelly, Jr.	*Agr*	*54⅔*	*Anna*
Walton, James Nathaniel	*Agr*	*24*	*Browns*
Walworth, Ralph Waldo	*Agr*	*99*	*Urbana*
Walworth, Stanton Eugene	*Agr*		*Urbana*
Walz, Ida Emily	*LAS*	*53*	*Danville*
Wamsley, Adalaid May	*HSAgr*		*Quincy*
Wandrack, Lura May	*SS*		*Woodstock*
Wang, Ching Wu	*Agr*		*Honan, China*
Wang, Kung-Kuan	*LAS*	*58*	*Shanghai, China*
Wang, Te Chang	*Agr*	*69*	*Soochow, China*
Wanzer, James Marshall	*Agr*	*75*	*Oak Park*
Warbritton, Hattie	*SS*	*4*	*Ladoga, Indiana*
Ward, Amy	*HSLAS*	*63*	*El Paso*
Ward, Cecilia Blair	*LAS*	*28*	*Urbana*
Ward, Frank Howard	*Agr*		*Dewey*
Ward, Janet	*HSLAS*	*3*	*Chicago*
Ward, Mamie Lawrence	*LAS*	*98*	*Chicago*
Ward, Mary Myrtle	*SS*	*16½*	*Glasgow*
Ward, Mary Winifred	*LAS*		*Saybrook*
Ward, Ruth	*LAS*		*Crescent City*
Ware, Manierre Barlow	*Agr*	*33*	*Chicago*
Warford, David Arthur	*Bus*	*6*	*Elizabethtown*
Warinner, Mabel Straube	*Mus*		*Urbana*
Warmolts, Cornelia Sara	*HSLAS*		*Oregon*
Warmolts, Lambertus, Jr.	*CE*	*51*	*Oregon*
Warner, Earle Eugene	*EE (SS)*	*107*	*Manito*
Warner, Harry Somes	*Agr sp*		*Vincennes, Indiana*
Warner, Lucy	*LAS*		*Argos*
Warnock, Harper McDill	*Agr*	*83½*	*Little York*
Warnshuis, Edward John Henry	*Bus*		*Oak Park*
Warren, Daniel Edwin	*Agr*		*Belvidere*
Warren, Paul Wilbur	*Bus*		*Ft. Wayne, Indiana*
Warren, Ralph Rowe	*CE*		*La Salle*
Warren, Thomas James	*CE*		*Pawpaw*
Washburn, Charles Sidney	*EE (SS)*	*108*	*Lenox Dale, Massachusetts*
Washburn, James William	*ME*	*33*	*Lenox Dale, Massachusetts*
Washburn, Raymond Allen	*A*		*Kewanee*
Wasson, Lorain Arthur	*MnE*		*Harrisburg*
Waterbury, Leslie Abram, C.E., 1905	*AE*		*Polo*
Waterman, Louise Hale	*LAS*	*27*	*Chicago*
Watson, Harry Francis	*Ch*	*40*	*Granite City*
Watson, Hazel Fitch	*SS*		*Hammond, Louisiana*
Watson, Jane Coulson	*LAS*	*101*	*Champaign*
Watson, John Wesley	*Agr*	*75*	*De Kalb*
Watson, Lelia Elta	*HSLAS*	*61*	*Champaign*
Watson, Minton William	*ME*	*61½*	*Champaign*
Watson, Newton Everett	*Agr*		*Chrisman*
Watson, Ray Marcus	*Agr*		*Cobden*
Watt, Margaret Louise	*SS*		*Winchester*
Watt, Russel A	*A*		*Florence, Wisconsin*
Watts, George William	*ME*	*110*	*Urbana*
Wead, DeForest Emery	*CE*	*49*	*Peoria*
Wead, John Trimmer	*LAS*		*Wyoming*
Webb, Donald Frederick	*Agr*		*Chicago*
Webb, Jasper Kent	*Agr*	*120*	*Niota*
Webber, Albert G, A.B., 1914	*L*		*Decatur*
Webber, Harry Edwin	*AE (SS)*	*118*	*Chicago*
Webber, Helen Waller	*LAS*	*97*	*Urbana*
Webber, Robert Alfred	*ChE*		*Urbana*
Weber, Gertrude T	*LAS*	*81*	*Olney*
Weber, Helen	*HSLAS*		*Olney*
Weber, Leonard Fred	*EE*		*Buckley*
Webster, David Coxe	*Bus*		*Wilmette*
Webster, Frances	*LAS*		*Shawmut, Montana*
Webster, Gladis Gilbert	*Agr*	*28*	*Washington, Indiana*
Webster, Lewis Selwyn	*MSE*		*Bartow, Florida*
Wedding, Mrs. Rose M	*SS*		*Jerseyville*
Wedge, Leslie B	*Bus*		*Kewanee*
Weems, Charles Lee	*LAS*	*16*	*Quincy*
Weenink, Ruth Antoinette	*HSAgr*	*32*	*Dillon, Montana*

Weeter, Harry Montgomery	*SS*	*5*	*Fredell, Pennsylvania*
Wehrle, Frank Ignatius	*Agr*	*31*	*Carmi*
Weihe, Wesley Huegely	*Mus*		*Nashville*
Weil, Ruth Carmen	*LAS*	*35*	*Oelwein, Iowa*
Weilepp, Eva Sarah	*HSLAS (SS)*	*102*	*Decatur*
Weilepp, Laura Elizabeth	*HSLAS*		*Decatur*
Weiler, Edward Grove	*EE*	*117*	*West Salem, Ohio*
Weinberg, Elizabeth	*HSAgr*	*31*	*Rushville*
Weinberg, Flora Jane	*HSAgr*	*87*	*Rushville*
Weingartner, Clyde Frederick	*AE (SS)*	*111*	*Rockford*
Weinshenker, Reuben Edward	*ME*	*38*	*Chicago*
Weir, Amy Azales	*HSLAS*		*Marshall*
Weir, Pearl	*HSLAS*		*Marshall*
Weisiger, George Bates, LL.B., 1911	*SS*		*Catlin*
Weisman, Clarence Schott	*SS*		*Keokuk, Iowa*
Weiss, Della	*LAS*	*31*	*Chicago*
Weiss, Marion Virginia	*LAS*	*45*	*Champaign*
Weiss, Nicholas George	*Agr*		*Chicago*
Welch, John Maurice	*ChE (SS)*	*118*	*La Salle*
Wells, Fred Sheaff	*ME (SS)*	*100½*	*Aurora*
Wells, Harry Andrew	*Agr*	*28*	*Dalton, Pennsylvania*
Welsh, Kathryn Clare	*LAS sp*	*27*	*Bradford*
Welsh, Marjorie Cecilia	*HSLAS*	*99*	*Bradford*
Welsh, Roger Thomas	*Agr*	*101*	*Rockford*
Welty, David Charles	*Agr*	*32*	*Amboy*
Welty, Duncan Oliphant	*Agr*		*Chicago*
Wessels, Marie	*Med*		*Quincy*
Wessels, Vera Gretchen	*LAS (SS)*	*100*	*Quincy*
Westbay, James Heron	*RME*		*Monett, Missouri*
Westbrook, Harold William	*Bus*		*Centralia*
Westenhaver, Le Roy John	*MnE*		*Chicago*
Westerman, Rodolpho G	*MSE*		*Curtyba, Brazil*
Westlund, Emil Hjalmer	*Bus*	*61*	*Chicago*
Westman, Adolph Fred	*EE*		*Winona, Minnesota*
Weston, Jessie Beatrice, Ph.B. *(Univ. of Chicago)* 1907	*Lb*		*Urbana*
Wham, Benjamin	*LAS & L*		*Cartter*
Wheeler, Bryant Long	*Agr*	*81½*	*Carrolton*
Wheeler, Hiram Hannibal	*Agr sp*		*Champaign*
Wheeler, Parker M	*ME*	*47*	*Champaign*
Wheeler, Russell Claire	*ME (SS)*	*113*	*Champaign*
Wheeler, William Erastus	*L*	*28*	*E. St. Louis*
Wheelhouse, Elizabeth Lux	*HSLAS*		*Decatur*
Wheelhouse, Mary Elizabeth	*LAS*	*65*	*Decatur*
Wheelock, Earle Nathaniel	*Agr*		*Wilmette*
Wheelock, Loyal Bergen	*AE*	*44*	*Chicago*
Whipple, Helen Katherine	*LAS*	*67*	*Medina, New York*
Whitacre, Elson Harmon	*AE*		*Chicago*
Whitacre, Raymond Charles	*A*	*136*	*Davenport, Iowa*
Whitchurch, Helen Margaret	*HSAgr*	*65*	*Salem*
White, Agnes Chloe	*HSLAS*	*32*	*Marion*
White, Alice Pauline	*HSAgr*	*14*	*Vestaburg, Michigan*
White, Beauchamp A	*LAS*		*Chicago*
White, Catharine Nell	*Mus*		*Urbana*
White, Frank Herbert	*EE*	*79*	*Chicago*
White, George Richard	*AE*	*73*	*Buffalo, New York*
White, Harold Hartwell	*Bus*		*Chicago*
White, Leslie Aldoris	*Agr*	*28*	*Chicago*
White, Lyde Evangeline	*Bus*	*42½*	*Urbana*
White, Marion Kingsley	*HSAgr*	*32*	*St. Joseph, Missouri*
White, Pauline, A. B. *(Earlham Coll.)* 1912	*Mus*		*Amo, Indiana*
White, Phares Lemar	*RME*	*56*	*Oxford, Indiana*
White, Russell Sherman	*Bus*		*Chicago*
White, Tell Thompson	*SS*	*6½*	*Pocahontas, Arkansas*
White, Thomas Kenneth	*EE*	*110*	*Champaign*
Whitehead, Paul	*LAS*	*21*	*Vienna*
Whitelaw, Arthur Keith, Jr.	*Med*	*5*	*Wood River*
Whitelaw, James Chalmers Cameron	*CerE*	*111*	*Glencoe*
Whiting, Vivian Justina	*HSLAS*	*33*	*Urbana*
Whitley, Guyon Carl	*Bus*	*66*	*Webster City, Iowa*
Whitley, Ralph Schureman	*Cer*	*30*	*Chicago*
Whitman, George Bruington	*Agr*		*Cameron*
Whitmire, Clarence Leonard	*Med (SS)*	*31½*	*Waverly, Iowa*
Whitnel, Joe	*L*	*28*	*E. St. Louis*
Whitney, Joseph Lafeton	*Bus*	*29*	*Oak Park.*
Whitney, Leonard Hilliard	*MnE*	*37*	*Downers Grove*
Whitson, Herman Ansel	*LAS*		*Rushville*
Whittemore, Kenneth Stoddard	*Bus*	*16*	*E. Aurora, New York*
Whitver, Howard Clifford	*Bus*		*Walnut*
Whitten, Jennie Alma	*SS*	*7*	*De Kalb*
Wickard, Hortense Elaine	*LAS (SS)*	*97*	*Garland City, Arkansas*

Wiedemann, David, Jr.	*Bus*	47½	*Harvey*
Wiedemann, Newell Evert	*A*		*Equality*
Wiedling, Clarence Clinton	*EE*	*101*	*Chicago*
Wiese, Alvin Otto	*LAS*		*Chicago*
Wight, Edith Marian	*LAS*		*Chicago*
Wiles, Bertha Harris	*LAS*	*9*	*Kansas City, Missouri*
Wiley, Harry Houghes	*CE*	*33*	*Sioux City, Iowa*
Wiley, Robert Ernest	*ME*	*75*	*Warren*
Wiley, Sarah Jana	*HSAgr*	*53*	*Colfax*
Wilkins, Albert F	*LAS*		*Cartter*
Wilkins, Charles Milton	*LAS*	*16*	*Griggsville*
Wilkins, Ernest Jesse	*LAS*		*Farmington, Missouri*
Wilkins, Stanley Charles	*Agr*	36½	*Chicago*
Wilkinson, Elon Gilbert	*Bus*	*120*	*Geneseo*
Wilkinson, Jackson Heath	*CE*	105½	*Bethany*
Wilkinson, Wardell	*Bus*		*Chicago*
Will, William George	*CE*	*44*	*Fairview*
Wille, Laura May	*HSLAS (SS)*	*92*	*Enid, Oklahoma*
Willey, Gilbert Stewart	*Agr*		*Warren, Minnesota*
Williams, Beulah Naomi	*LAS*		*Hume*
Williams, Chester Albert	*A*	*36*	*Sterling*
Williams, Fenton Hamilton	*LAS (SS)*	*61*	*Watseka*
Williams, Floyd Earl	*ME*	*29*	*Rockford*
Williams, Fred Ray	*Agr sp*	*15*	*Cloverdale, Indiana*
Williams, George Alfred	*LAS*		*Peoria*
Williams, Helen Jackson	*Bus*	*35*	*Streator*
Williams, Irene	*HSAgr*		*Ravanna, Missouri*
Williams, John Milton	*LAS*		*Dixon*
Williams, Leslie Albert	*Agr*		*Ava*
Williams, Lewis Ward	*SS*	*8*	*Newton Falls, Ohio*
Williams, Margaret Stuart, A. B. *(Univ. Texas)* 1912	*Lb (SS)*	*41*	*Hamilton, Texas*
Williams, Mary Catherine	*LAS*		*Woodland*
Williams, Oswald Howell	*A*		*Granite City*
Williams, Robert Tatman	*LAS*		*Quincy*
Williams, Walter H	*ChE*		*Ritchie*
Williford, Edward Allan	*EE*	*108*	*E. St. Louis*
Willis, Reba	*SS*	5½	*Mt. Carmel*
Willmarth, Clarence Alfred	*AE*	*36*	*Atlanta, Georgia*
Wills, Mary Etta	*LAS (SS)*	*80*	*Watseka*
Willson, Harold Edwin	*MnE (SS)*	*49*	*Baltimore, Maryland*
Willson, Jennie Fae	*LAS*	*56*	*Nokomis*
Wilson, Alfred David	*Agr*	*66*	*McNabb*
Wilson, Allen Center	*CE*	*30*	*La Grange*
Wilson, Ashbel Ray	*ME*	*68*	*Hutsonville*
Wilson, Clarence Leon	*Med*		*Carbondale*
Wilson, Donald Eugene	*ChE*		*Rossville*
Wilson, Grover C	*EE*	*36*	*Walnut*
Wilson, Helen May	*LAS*	*70*	*Chicago*
Wilson, Isabella Chilton	*LAS (SS)*	60½	*Arbuckle, West Virginia*
Wilson, Kenneth Leon	*SS*	*7*	*Atwood*
Wilson, Leo	*Med*		*Champaign*
Wilson, Lyle Avery	*A*		*Hamburg*
Wilson, Ralph Oliver	*Agr*		*McNabb*
Wilson, Ray Walker	*Bus*		*Princeton, Missouri*
Wilson, Walter LeRoy	*LAS*		*Alton*
Wilson, Willard Oliver	*Bus*	*32*	*Wilmot, Mississippi*
Wilson, Williams Webb	*Agr*	*108*	*Brownstown*
Wilson, Winifred	*LAS*	*7*	*Atwood*
Winans, Harold George	*EE*	16½	*Aurora*
Wing, Orion N	*LAS (SS)*	*85*	*Capron*
Winkleman, Ralph Randolph	*Med*		*Belleville*
Winklemann, Roland Earl	*LAS*	*4*	*Belleville*
Winkler, Ross Wayne	*Agr*		*Newman*
Winn, George Pickrell	*EE*	*10*	*Kansas City, Missouri*
Winokur, Morris Charles	*RCE*	*75*	*Chicago*
Winship, Mary Alameda	*HSLAS*		*Tiskilwa*
Winter, Elijah	*Agr*	*24*	*Annawan*
Winters, Charles Prior	*Bus*	*99*	*Chicago*
Winters, Harrison	*A*		*Milwaukee, Wisconsin*
Winters, Lawrence Morse	*Bus*		*Chicago*
Wirth, Walter Valentine	*ChE*	*34*	*Mt. Carmel*
Wise, Clark Edward	*Agr*	*31*	*Champaign*
Wisegarver, Carter Campbell	*Agr*		*De Land*
Wisegarver, Elizabeth Pauline	*HSLAS*	*30*	*De Land*
Wiseliart, Eugene Lawrence	*Agr*	*15*	*Indianapolis, Indiana*
With, George Orlando	*MSE*	107½	*Joliet*
Witherspoon, Clyde Findley	*Agr*		*Champaign*
Witty, George Edwin	*Agr sp*		*Pleasant Plains*
Woelbeling, William Kenneth	*EE (SS)*	*77*	*Chicago*
Woerman, Lillian Homens	*HSAgr*		*St. Louis, Missouri*
Wold, Ingal Eusor	*Agr*	70½	*Dixon*
Wolf, Antonette Catherine	*LAS*	*18*	*La Salle*

Wolfe, Viola Esther	*LAS (SS)*	*101*	*Urbana*
Wolff, Aline Jeanette	*HSLAS*		*Urbana*
Wolgast, Leota Alice	*LAS*		*Danforth*
Wolter, Herbert	*Agr*		*Danville*
Wolter, Mitchell	*LAS (SS)*	*70*	*Moline*
Woltmann, Louis William	*Bus*	*3¼*	*Nokomis*
Womacks, Mabel Clara	*LAS*	*106*	*Champaign*
Wong, Te Chang	*SS*	*8*	*Soochow, China*
Wong, Yick Keun	*Agr (SS)*	*51*	*San Francisco, California*
Woo, Yin	*Bus*	*30*	*Swatow, Kwang Tung, China*
Wood, Adeline	*HSAgr*	*6¼*	*Sullivan*
Wood, Bonny Blossom	*SS*		*Mitchell, Indiana*
Wood, Charles Clifford	*CE*		*Jacksonville*
Wood, Harry Thomas	*LAS*	*5*	*Hennepin*
Wood, Lawrence Anselm	*SS*	*8½*	*Mitchell, Indiana*
Woodard, Roma Lillian	*HSAgr*		*Sidney*
Woodburn, Chester C	*A*		*Boone, Iowa*
Woodroofe, Louise Marie	*LAS*	*46*	*Champaign*
Woodward, Edwin Mortimer	*SS*	*75*	*Odin*
Woods, Andrew Chevalier, Jr.	*ME*	*36*	*Chicago*
Woods, Frances Octand	*LAS*	*11*	*St. Louis, Missouri*
Woods, Lenna Beryl	*LAS*		*Champaign*
Woods, Ralf Charles	*Agr*	*33*	*Evanston*
Woods, Ray James	*Bus*	*33*	*Evanston*
Woodward, Groff Lawrence	*L*		*Decatur*
Woodyatt, Harold	*Bus*	*29½*	*Dixon*
Woolbert, Charles Henry	*LAS*		*Urbana*
Woolf, Henry Solomon	*Agr*	*93*	*E. London, South Africa*
Woolman, Rachel Margaret	*HSAgr*	*68*	*Urbana*
Woolman, Richardine	*LAS*	*71*	*Hot Springs, Arkansas*
Worcester, Lenora Mary	*HSLAS*	*96*	*Genoa*
Worcester, Richard Ladd	*Bus*		*Roodhouse*
Worner, Henry Harold	*Agr*		*San Jose*
Worthington, Robert, Jr.	*Med*	*37*	*Petersburg*
Wray, Charles William	*Agr*	*67*	*Rockford*
Wrede, Bertram Alfred	*CE*	*26*	*Chicago*
Wright, Agnes	*LAS*	*63*	*Charles City, Iowa*
Wright, Bertha Belle	*SS*		*Champaign*
Wright, Donald Townsend	*ChE*		*Chicago*
Wright, Douglas, Jr.	*Agr*	*85*	*Decatur*
Wright, Edward Paul	*CE*	*73*	*Brocton*
Wright, Emma	*HSAgr*	*33*	*McLean*
Wright, Francis Marion	*ME*		*Urbana*
Wright, Josef Franklin	*Bus*	*57*	*Beaumont, Texas*
Wright, Joseph Franklin	*LAS*		*Champaign*
Wright, Newton Anthony	*Agr*	*113½*	*Shelbyville*
Wright, William Edison	*Med*		*Gifford*
Wrisley, George Alfred	*ChE*	*7¼*	*Chicago*
Wu, Wei Yoh	*LAS*	*64½*	*Hinaan, China*
Wuerker, Adolph Kirsch	*Bus*		*Alton*
Wycoff, Benjamin Harrison	*Agr*	*136⅓*	*Laura*
Wykle, Ethel Marie	*HSAgr*	*83*	*Mahomet*
Wyland, Ray Orion	*LAS (SS)*	*91½*	*Ringwood, Oklahoma*
Wyman, Wallace	*A*	*127*	*Mansfield*
Yaeger, Hazel Marie	*SS*	*5½*	*Litchfield*
Yale, Gertrude Emily	*LAS*		*La Grange*
Yamamota, Soichi	*EE*	*76*	*Honolulu, Hawaii*
Yang, Tsao Shing	*EE (SS)*	*42½*	*Sinhua, Hunan, China*
Yapp, James Fook Onn	*CE (SS)*	*109*	*Honolulu, Hawaii*
Yeager, Leland Edward	*CerE*		*Maywood*
Yee, Gan Chyo	*ChE (SS)*	*37½*	*Shangning, Hunan, China*
Yerkes, Charles Wrenn	*SS*	*7*	*Moweaqua*
Yerington, John George	*Agr*		*Watervliet, Michigan*
Yim, Albert Mun	*CerE*	*5*	*Honolulu, T. H.*
Yindrock, Leo Edwin	*MnE*		*Chicago*
Yoch, Florence Teresa	*Agr*	*98*	*Santa Anta, California*
Yockey, Merle Albert	*Bus*		*Beardstown*
Young, Adlai C	*REE*		*Menomonie, Wisconsin*
Young, Arthur Tatarian	*Bus*	*35*	*Chicago*
Young, Ruth Elizabeth	*LAS*	*9¼*	*Casey*
Younglove, Clyde Charles	*AE*	*143*	*Sioux City, Iowa*
Yu, Hsi-Chi	*Bus*	*18*	*Anhui, China*
Zahn, Fred Raymond	*MSE*	*132½*	*Belle Rive*
Zaleskie, John Paul	*Agr*	*26*	*Louisa, Russia*
Zelle, Carl Alfred	*Ch*	*71*	*Lake Fork*
Zeller, Laurence	*Bus*		*Brazil, Indiana*
Zeter, Harry Moyer	*Agr*	*99½*	*Lincoln*
Zieman, William Walter	*ChE*	*105*	*Chicago*
Zieroth, Edward Henry	*Agr*		*Chicago*
Ziese, Fred	*SS*	*2*	*Sullivan*
Zimmermann, Anthony Urban	*ME*	*11¼*	*Peoria*

Zimmermann, Arthur Charles	*AE (SS)*	*94*	*Peru*
Zinser, Robert Bruce	*Bus*	*52*	*Washington*
Zipf, Oscar Robert, Jr.	*Agr*	*61*	*Freeport*
Zipprodt, Roy Richard	*AE*	*112*	*Urbana*
Zollinger, James Edward	*EE*	*109*	*Alliance, Nebraska*

COLLEGE OF MEDICINE

Name	Year	Residence
Ackerman, Joseph William	*2*	*Chicago*
Adams, Gordon Charles	*3*	*Newton Center, Massachusetts*
Adams, Mabel India	*sp*	*Fontanelle, Iowa*
Alden, Samuel Jacob	*4*	*Goodlettsville, Tennessee*
Alder, Clay, Ph.C.	*4*	*Athol, Kansas*
Anderson, Karl A	*4*	*Kent City, Michigan*
Anderson, Richard Elseph	*1*	*Lynn Center*
Anderson, Stewart Harry	*4*	*Wells, Minnesota*
Appelle, Conrad George	*3*	*Mt. Carroll*
Arakelian, Senekerim Hovhannes, A. B.	*4*	*Turkey*
Armstrong, Clifford Oakley	*1*	*Bloomington*
Armstrong, Victor Scott	*2*	*Chicago*
Asuzano, Marcelino	*4*	*Manila, Philippine Islands*
Baker, William Asa	*2*	*Richmond, Maine*
Barickman, Robert Irving	*3*	*Lewisville, Minnesota*
Barnett, Alexander Herbert	*4*	*Chicago*
Barnett, Edwin Judge	*3*	*Peoria*
Beatty, Ernest Gaston	*4*	*Jerseyville*
Beatty, Hannah Jane	*3*	*Lake View, Ohio*
Benjamin, Harry Webb	*2*	*Chillicothe*
Bennett, John Francis	*3*	*Waterford, Wisconsin*
Berge, Maurice Aurelius	*2*	*Ransom*
Bergin, Clifford Edward	*3*	*Chicago*
Bernstein, Alick	*3*	*Chicago*
Betts, Arthur	*4*	*Mitchell, South Dakota*
Bivings, Franklin Carlisle	*3*	*Atlanta, Georgia*
Blim, Warren Caldwell	*3*	*Crete*
Blodgett, Pliny Russell	*3*	*Harvard*
Boddiger, Charles Edwin, Ph.G., M. D.	*sp*	*Chicago*
Bolka, Bernard Joseph	*3*	*Michigan City, Indiana*
Bowden, John Miles, Ph.C.	*2*	*Brunswick, Georgia*
Bowell, Roy Melson	*3*	*Rolling Prairie, Indiana*
Brodsky, Lewis Leonard	*4*	*Chicago*
Brosnan, John Thomas	*3*	*Chicago*
Broudo, Philip Harmon	*4*	*Toronto, Ontario*
Brown, Dean Cassius	*4*	*Minneapolis, Minnesota*
Brown, Lyle Leland	*1*	*Crookston, Minnesota*
Browne, Lewis Edwin Joel	*3*	*Lewistown, Missouri*
Brucker, Edward Arthur	*3*	*Fond du Lac, Wisconsin*
Burling, Wesley Morgan	*3*	*Muskegon, Michigan*
Burlingame, Clarence Charles, M D.	*4*	*Rockford*
Byrnes, William Armstrong	*2*	*Minneapolis, Minnesota*
Capron, Manley Joseph	*3*	*Waldron, Colorado*
Carothers, Herbert Chapman	*2*	*Chicago*
Carr, Earl Curtis	*4*	*Maquoketa, Iowa*
Carroll, William Franklin	*3*	*Hannibal, Missouri*
Carstensen, Albert Brockway	*3*	*Waverly, Iowa*
Casey, Emmet Francis	*3*	*Chicago*
Cienciara, Felicia Helen	*4*	*Chicago*
Clark, Alger Arthur	*3*	*Chicago*
Claypool, Blaine Wilson	*3*	*Chicago*
Cobb Horace R	*3*	*Kalamazoo, Michigan*
Cody, Michael Milton	*3*	*Chicago*
Cohler, Lazarus	*4*	*Chicago*
Conway, John M	*4*	*Elroy, Wisconsin*
Cooper, Ward	*3*	*Parsons, Kansas*
Corpus, Telfio Pedro	*4*	*Aliaga, Philippine Islands*
Cotton, Schuyler Opp	*3*	*Vermilion, South Dakota*
Cross, Aubrey James	*3*	*Aberdeen, Washington*
Curl, Howard E., A.B.	*3*	*Chicago*
Cushman, Agnes Beulah	*3*	*Bethany, Missouri*
Cutler, Irwin Herbert	*4*	*Chicago*
Cutting, Lloyd David	*3*	*Stevens Point, Wisconsin*
Dailey, George Leslie	*4*	*Almena, Kansas*
Dame, Louis	*2*	*Chicago*
Doktorsky, Maurice	*2*	*Chicago*
Doughty, James William	*4*	*Elroy, Wisconsin*
Dyer, William Holmes	*3*	*Chicago*
Dysart, Benjamin Quincy	*1*	*Granville*
Earel, Fred Elwell	*3*	*Abingdon*
Eck, Charles Patt, Ph.G.	*3*	*Chicago*
Edwards, Walter Raymond	*3*	*Ward, Iowa*

Eisenberg, Dave	3	*Minneapolis, Minnesota*
Elston, Lynn Wickwire	3	*Angola, Indiana*
Elvidge, Ross Edmund	4	*Rockford*
Evans, Arthur Morgan	3	*Chicago*
Eye, Boyd Franklin, Jr.	3	*Talmage, Kansas*
Far, Shakir Elias	3	*Palestine, Turkey*
Farbiszewski, Amelia	2	*Chicago*
Fenchel, Louis Samuel	2	*Chicago*
Fink, Marion Shelley	3	*Chicago*
Finsand, Victor	3	*Aberdeen, South Dakota*
Fitzgerald, George Michael	4	*Fond du Lac, Wisconsin*
Fordyce, Alexander William	3	*Gilman*
Formosa, Anthony Carlo	4	*Chicago*
Fortelka, Frank Louis	2	*Chicago*
Fournadjieff, Dimiter George	4	*Chicago*
Franchere, Chetwynd Mair	4	*Chicago*
Francisco, Sixto Acosta	2	*Batangas, Philippine Islands*
Frederickson, Sophie Henrietta	3	*Chicago*
Freilich, Harry Hirsch	4	*Chicago*
Frise, Dudley Cureton, Ph.B.	4	*Minneapolis, Minnesota*
Gates, Leo Vincent	2	*Elgin, Minnesota*
Gilchrist, Virgil Martha, B.S.	2	*Moscow, Idaho*
Gochnaur, Orlando Merrill	4	*Freeport*
Gilmore, Russel Adams	2	*Michigan City, Indiana*
Glover, Harold Mortimer	3	*Newton, Kansas*
Goggin, John Gervase	3	*Rochester, Minnesota*
Goldberg, Benjamin	3	*Chicago*
Golden, Waldo Emerson	2	*Champaign*
Gordon, George	4	*Chicago*
Gordon, James Kenneth	2	*Sparta*
Gottschalk, Clara Grace	4	*Chicago*
Goy, Michael	4	*Chicago*
Graham, Reuben Waddell	4	*Gallipolis, Ohio*
Greenwald, Saul Charles	4	*Chicago*
Grissom, Calton Barney	2	*Syracuse, Kansas*
Hahn, Frederick	4	*Omaha, Nebraska*
Hakansson, Eric Gosta	4	*Chicago*
Hartwell, Basil Orman	2	*Maysville, Missouri*
Hartwig, Gerhard Frederick	4	*St. Ansgar, Iowa*
Hasek, Victor Hugo	3	*Cedar Rapids, Iowa*
Hawthorne, Grace Maude	3	*Nevada, Iowa*
Herpe, Gustav Goodman	4	*Chicago*
Hildebrand, Gustav John	2	*Sheboygan, Wisconsin*
Hoagland, Arthur William	4	*Minneapolis, Minnesota*
Hoff, Einar	4	*Chicago*
Hoffman, Goldie	4	*Chicago*
Hollender, Abraham	4	*Chicago*
Hollmers, William David	4	*Chicago*
Hommell, Placido Ramos Vasquez	3	*Neillsville, Wisconsin*
Hubbell, Joseph Albert	2	*St. Cloud, Minnesota*
Huber, Paul Robert, Ph.G.	2	*Chicago*
Hughart, Harold Hershall	2	*Pocatello, Idaho*
Hunt, Gerald Charles	3	*Des Moines, Iowa*
Ignatius, Arsharvie	3	*Armenia*
Israelson, William	3	*Chicago*
Iverson, Louis	2	*Badger, Minnesota*
Jacobson, Clarence August	3	*Chicago*
Jacobson, Leo Jacob	3	*Chicago*
Jaffe, Joseph	3	*Chicago*
Jaracz, Walter John	3	*Chicago*
Jeffrey, Charles Wykoff	4	*Osceola, Nebraska*
Jeffrey, James Robinson, Jr.	2	*Nortonville, Kansas*
Jeffries, Daniel William	3	*Marietta*
Jelliffe, Martin Bushnell	2	*Mansfield, Ohio*
Johnson, Walter Lawrence	3	*Falls City, Nebraska*
Jones, Alfred Edward	4	*Chicago*
Kadish, Benjamin	2	*Chicago*
Kahn, Meyer	4	*Chicago*
Katz, Harry	3	*Chicago*
Kennedy, Josephine, A.B.	2	*Wheaton*
King, Elbert Rife	4	*Pueblo, Colorado*
King, Ralph	3	*Olney*
Kleger, Samuel Arthur	4	*Battle Creek, Michigan*
Klein, Robert Gotfred	4	*Montrose, Colorado*
Kline, Ralph Glenn	2	*La Porte City, Iowa*
Knight, Leaf Cort	4	*Sioux Falls, South Dakota*
Koch, Herman Carl	3	*Harvard*
Koptik, George	1	*Chicago*
Kulasavicz, Bernard J	3	*Bessemer, Michigan*
Kutzenberger, Helen Pearl	3	*Jerseyville*
Kwauk, Zang Yien, B.S.	2	*Canton, China*
Lambert, Harry Furniss	4	*Cedar Falls, Iowa*
Lampert, Max	3	*Forest Park*

Landau, George Milton	4	*Chicago*
Langdon, Floyd Burdick	4	*Chicago*
Langlois, Harvey Louis, A.B.	2	*Kankakee*
Larkin, Cyril James	4	*Chicago*
Lefkoff, Theresa Glustoff	2	*Chicago*
Leibinger, Henry Robert	3	*Chicago*
Leiserwitz, Samuel Brody	2	*Herscher*
Lin, Hie-Ding	4	*Foochow City, China*
Lipp, George Robert	3	*Brandon, Wisconsin*
Lipschultz, Jacob	3	*Chicago*
Lungmus, Bruno	3	*Chicago*
Lutz, Carl William	4	*Ottawa*
Lyman, Horace Chauncey	4	*Graceville, Minnesota*
Madsen, George Walter	2	*Chicago*
Mandanas, Aniceto Y	3	*Banan, Philippine Islands*
Marchan, Juan Sixto	3	*Barceloneta, Porto Rico*
Mars, Hartley Farnham, Ph.C.	2	*St. Paul Park, Minnesota*
Martin, Leon Wade, Ph.C.	2	*Plainwell, Michigan*
Masslow, Eleanor Sophia	4	*Forest Park*
Matthews, Cora Arminta	3	*Champaign*
May, Edwin Ralph	2	*Clinton*
Mayers, Lawrence Hampson, A.B.	4	*Millersberg, Ohio*
Meggers, Edward Charles	2	*Walker, Iowa*
Mix, Walter Spaulding	4	*Beardstown*
Moffett, Reuben Alvord	3	*Wenona*
Morse, Morton Patrick	4	*LeRoy, Minnesota*
Mulholland, William James	3	*Chicago*
Murphy, Thomas Burton	1	*Oakesdale, Washington*
McCaffrey, Eugene Henry	4	*Maquoketa, Iowa*
McCaffrey, Phillip John	2	*Chicago*
McClanahan, Benjamin Vaughn	4	*Galesburg*
McCornack, Robert Lee	4	*Chicago*
McCoy, Henry James	2	*Amboy*
McGuire, Mary Ruth	3	*Holstein, Iowa*
McRae, Maury Holcombe	3	*Corinth, Mississippi*
Nakaya, Fusa	3	*Kyota, Japan*
Nigro, Rocco	3	*Chicago*
Norton, Harry Sims	3	*Pontiac*
Norwood, Lincoln Harrison	2	*Bluejacket, Oklahoma*
Ofner, Lester Irving	4	*Chicago*
Ogden, Claude Harris	4	*Cedarville, New Jersey*
Olson, Clarence Willard	2	*Escanaba, Michigan*
Orcutt, Arthur Henry, A.B., B.S.	1	*Arcola*
Pacak, Frances	4	*Chicago*
Paskind, Jacob	3	*Chicago*
Peterson, Edwin	4	*Rockford*
Peterson, Harry Michael	3	*Chicago*
Peterson, Ralph Waldo	3	*Chicago*
Piaseczynski, Francis	1	*Chicago*
Pilot, Isadore	3	*Chicago*
Pinkerton, Charles Clifford	4	*Pawnee City, Nebraska*
Pino, Ralph Harrison	3	*Ithaca, Michigan*
Piro, Victor	3	*Cle Elum, Washington*
Preston, William Booker	3	*Salt Lake City, Utah*
Radabaugh, Rudolph Charles	2	*Zumbro Falls, Minnesota*
Radeff, Ivan Nicholas	1	*Chicago*
Raim, William	3	*Chicago*
Raman, Henry Benjamin	3	*Farmingdale*
Reich, Sigmund	3	*Chicago*
Reinhardt, Charles Henry	4	*Chicago*
Rock, John Lestrange, B.S., A.B.	3	*Lexington, Oklahoma*
Roth, Jesse Henry, A.B., M.S.	4	*Chicago*
Roushausen, Clara	1	*Oak Park*
Rowland, Samuel Joy	3	*Sunnyside, Washington*
Royster, Hallace Rector	2	*Argo*
Saha, Pramathanath	4	*Calcutta, Indiana*
Salpas, Spero	2	*Chicago*
Sanders, George Edward	2	*Champaign*
Sandrock, George Paul	3	*Watertown, Wisconsin*
Sathe, Marcus Roy	4	*Jackson, Minnesota*
Sauer, Francis Joseph	2	*Chicago*
Schick, Frank Joseph	4	*Chicago*
Schiele, Richard Frederick	4	*Joliet*
Schiff, Nathan Samuel	3	*New York City*
Seilin, Joseph	4	*Chicago*
Sered, Harry	2	*Milwaukee, Wisconsin*
Sexsmith, Edna Kathryne, B.A.	1	*Greenfield, Iowa*
Seletz, Abraham	3	*Chicago*
Senelick, Marius David	4	*Chicago*
Senescall, Cleve Ridlon	4	*Ortonville, Minnesota*
Severson, James Melvin	3	*Deerfield, Wisconsin*
Sharp, Jeremy Joseph	4	*Mill Creek, Indiana*
Shaw, Edith Marion	2	*Peru, Nebraska*

Shell, Arthur Edwin	4	*Clinton*
Short, Roy Davis	3	*Whitehall*
Siewerth, Walter Scott	4	*Chicago*
Silverstein, Willis Irving	3	*Chicago*
Sladek, Edward Frank	1	*Chicago*
Small, James Craig, B.S.	2	*Chambersburg, Pennsylvania*
Smart, Clarence Earl	4	*New Lisbon, Wisconsin*
Smith, Dean Stanley	4	*River Falls, Wisconsin*
Smith, Lloyd Emerson	3	*Marietta*
Spiering, Arthur Kern	3	*Fond du Lac, Wisconsin*
Staib, Henry Albert	4	*Bartlett*
Stein, William Frederick	4	*Cisne*
Stern, Jacob	3	*Chicago*
Stern, Louis Henry	3	*Chicago*
Stern, Simon	4	*Chicago*
Stevenson, James	2	*Chicago*
Stolfa, Ladislaw	3	*Chicago*
Stuart, Christopher Brown	4	*Springfield*
Sullivan, Thomas John, Jr.	4	*Chicago*
Sutch, Armand Kredel	2	*Chicago*
Sutherland, Jacob Marion	4	*McKinney, Texas*
Swinehart, Bertram Oliver	2	*Cooksville*
Sykes, Newman Marion, B.S.	2	*Decatur, Alabama*
Syverson, Bion Claude	4	*Westby, Wisconsin*
Szwajkart, Adam Leo	2	*Chicago*
Talbot, Edwin Robert	4	*Joliet*
Taub, Samuel Jack	3	*Chicago*
Thiell, James Edward	4	*Fond du Lac, Wisconsin*
Tiedeman, Ian Davis	3	*De Soto, Wisconsin*
Timm, Harry Emil Louis	4	*Crown Point, Indiana*
Tomlin, Russell	3	*Easton*
Tomsu, Charley Lewis	3	*Renfrow, Oklahoma*
Toothaker, Joel Edwin	3	*Sandoval*
Vander Kloot, Albert	4	*Chicago*
Vartanian, Mandiros Bekrow	3	*Harpoot, Turkey*
Varzhabedian, Mihrain A., B.A.	4	*Erbaa, Turkey*
Volberding, Harry Henry	4	*Bensonville*
Wagoner, Amanda Irene	4	*Delphi, Indiana*
Wallingsford, William Jewell	4	*Chicago*
Wayland, Thomas Alfred	4	*Macomb*
Wedge, Athol Horatio	3	*Waupun, Wisconsin*
Weightman, Marian A	4	*Carpentersville*
Welch, Roland Aretus	4	*Battle Creek, Michigan*
Welden, Ned Amos	2	*Weaton*
Wiese, Walter Fred	4	*Milwaukee, Wisconsin*
Willander, Alfred Arthur	4	*Winthrop, Minnesota*
Williams, Mary Edith, A.M.	2	*Evanston*
Wilson, Harry Hults	3	*Marshalltown, Iowa*
Wilson, Marcus Bryed	3	*Huron, South Dakota*
Wojniak, Frank	2	*Chicago*
Wolf, Paul Jacob	3	*Chicago*
Woolley, Walter Anthony	4	*Lancanshire, England*

COLLEGE OF DENTISTRY

Name	Year	Residence
Albers, William	1	*Chilton, Wisconsin*
Anderman, Sanford	2	*Chicago*
Anderson, Martin Rudolph	1	*Lynn Center*
Baird, William Glen	1	*Portland, Oregon*
Baumstein, Michael	3	*Chicago*
Berman, Harold H	2	*Chicago*
Bernstein, Nathan M	2	*Chicago*
Biehler, Rudolph Waldemar, M.D.	3	*Freiburg, Germany*
Blaine, Luther L	2	*Douglas, Wyoming*
Blair, Maurice I	2	*Chicago*
Bonney, Thomas Chew	2	*Aberdeen, South Dakota*
Brogmus, Ernest J P	3	*Chicago*
Bortz, Louis William	3	*La Porte, Indiana*
Bostik, Edward Joseph	2	*Belleville, Kansas*
Coltman, Harry Dean	2	*Chicago*
Condit, Harold S	2	*Chicago*
Cusick, William Arthur, Jr.	2	*Chicago Heights*
Deist, Milzor William	3	*Harper, Kansas*
Dierks, George W	3	*Toledo, Ohio*
Dixon, Robert Jesse	2	*Elroy, Wisconsin*
Dolson, John Lewis	1	*Charlotte, Michigan*
Epstein, Alex	1	*Chicago*
Fields, George William	1	*Gibson City*
Felcher, George L	3	*Chicago*
Fonda, James Everett	3	*North Platte, Nebraska*

Franzwa, Charles Francis	*1*	*Mondovi, Wisconsin*
Frazer, J Ruple	*2*	*Bessemer, Michigan*
Fullerton, Richard Maxwell	*3*	*Ann Arbor, Michigan*
Gallie, Donald Muirhead	*3*	*Wilmette*
Goodfriend, Samuel H	*3*	*Chicago*
Hansen, Harold O	*3*	*Chicago*
Harnick, Harry	*2*	*Chicago*
Houth, John Francis	*3*	*Chicago*
Humphrey, Robert I	*2*	*Chicago*
Hussey, Frank A	*3*	*Minneapolis, Minnesota*
Ihde, Dean Elbert	*1*	*Waupun, Wisconsin*
Ihle, Chester	*2*	*Newfolden, Minnesota*
Irimajiri, Naoshige	*sp*	*Tokio, Japan*
Jarrett, Frank Alfred	*1*	*Chicago*
Jaros, Joseph Edward	*1*	*Chicago*
Jelen, Vladimir	*2*	*Chicago*
Jesser, Jacob	*2*	*Chicago*
Johnson, Ernest G	*2*	*Hawley, Minnesota*
Koch, Lawrence M	*2*	*La Porte, Indiana*
Kohn, Morris	*2*	*Chicago*
Kousnetz, Louis B	*2*	*Chicago*
Krejci, Edward J	*3*	*La Porte, Indiana*
Kubacki, Waclaw H	*1*	*Chicago*
Kuzow, Louis	*1*	*Chicago*
Lee, Carl Sigwart	*1*	*Mondovi, Wisconsin*
Lincoln, Robert Grant	*2*	*Union Grove, Wisconsin*
Litscher, A Arthur	*2*	*Fox Lake, Wisconsin*
Loewenthal, Louis C	*2*	*Chicago*
Martin, Carl David	*3*	*Chicago*
Mershimer, James Dwight	*1*	*Chicago*
McCornell, Charles	*2*	*Gibson City*
Nemecek, Charles Anton	*1*	*Chicago*
Ohta, Letsuo	*sp*	*Tokio, Japan*
Orloff, Louis	*2*	*Chicago*
Ostrowski, Theodore Charles	*1*	*Chicago*
Person, Allgot Gustaf	*2*	*Chicago*
Playman, Harold Lemoyne	*2*	*Stevens Point, Wisconsin*
Reckard, Harry Jefferson	*1*	*Chicago*
Reiseman, Henry	*2*	*Chicago*
Richter, Camilla	*2*	*Chicago*
Rubin, Edward Allen	*1*	*Chicago*
Saubert, Arthur F	*2*	*South Kaukauna, Wisconsin*
Schlussel, Noah W	*2*	*Detroit, Michigan*
Schroeder, Walter H	*3*	*Chicago*
Shalek, Victor James	*1*	*Chicago*
Sherman, Robert Isadore	*1*	*Chicago*
Smith, Pepper Wheeler	*2*	*Fort Toten, North Dakota*
Smith, Barnett Q	*2*	*Carrollton, Missouri*
Sommerfield, Nate	*3*	*Chicago*
Steinberg, Abel David	*3*	*Chicago*
Tark, Leo A	*2*	*Chicago*
Upp, Roscoe Winters	*2*	*Havana*
Welch, Harold William	*2*	*Chicago*
Werninghaus, William Ernest	*3*	*Melrose Park*
White, Leslie George	*1*	*Golden*
White, Leland J	*3*	*Chicago*
Williams, J Augustus	*1*	*Chicago*
Winsberg, Harry	*1*	*Chicago*
Wood, Max T	*2*	*Charlotte, Michigan*

SCHOOL OF PHARMACY

Name	Course*		Residence
Albright, Mahlon Franklin	*P*	*1*	*Auburn, Indiana*
Allen, James Henry, Jr.	*P*	*sp*	*Griggsville*
Allen, Monte	*P*	*2*	*Grayslake*
Allman, Kenneth Frederick	*P*	*2*	*Rensselaer, Indiana*
Anderson, Le Roy Eugene	*P*	*sp*	*Moline*
Anderson, Richard Joel	*P*	*2*	*Chicago*
Andrzelczyk, Vincent	*P*	*1*	*Chicago*
Aron, Fannie Lillian	*P*	*2*	*Chicago*
Ayers, Leo	*P*	*sp*	*Chicago*
Baker, Sam Leon	*P*	*2*	*Gary, Indiana*
Bakkers, Arthur	*P*	*1*	*Chicago*
Bakkers, Neff Kuyper	*P*	*1*	*Chicago*
Baldwin, Edgar	*P*	*1*	*Genoa*
Barone, Christopher	*P*	*2*	*Chicago*
Beckman, William	*P*	*1*	*Chatsworth*

*Abbreviations: P, Pharmacy; PC, Pharmaceutical Chemistry; 1, first year; 2, second year; sp, special.

Bianco, Mike Robert	*P*	*2*	*DuQuoin*
Black, Waldo Knox	*P*	*1*	*Chicago*
Bloom, Irwin	*P*	*1*	*Chicago*
Boehm, Frederick Evenson	*P*	*2*	*Neenah, Wisconsin*
Bogard, Asher Holland	*P*	*1*	*Olney*
Borucki, Edward Anthony Felix	*P*	*2*	*Chicago*
Bradley, James Francis	*P*	*1*	*Charleston*
Brekke, Marshall Theodore	*P*	*2*	*Rice Lake, Wisconsin*
Brewer, Chester Wellington	*P*	*2*	*Urbana*
Brierton, Harold	*P*	*1*	*Dixon*
Brinkerhoff, Garry Russell	*P*	*1*	*Chicago*
Bronner, Paul	*P*	*1*	*Chicago Heights*
Bucke, William Stuhlmann	*P*	*2*	*Chicago*
Buckrucker, Walter	*P*	*2*	*Chicago*
Bundy, Carroll Edwin	*PC*	*2*	*Sheldon*
Chamness, Burrell, Ph.G. *(St. Louis Coll. of Pharmacy)* 1907	*P*	*sp*	*Marion*
Claus, Robert	*P*	*1*	*Chicago*
Clay, Byron Eugene	*P*	*2*	*Lena*
Combacker, Marie Frances, A.B. *(Carroll Coll.)* 1913	*PC*	*2*	*Elkworth, Wisconsin*
Copeland, Thomas Bragg	*P*	*1*	*Grand Junction, Colorado*
Cortesi, Dante	*P*	*1*	*Cairo, Egypt*
Crisp, John Everett	*P*	*1*	*Jonesboro*
Crist, Raymond James	*P*	*1*	*Chicago*
Curlee, Raymond Anderson	*P*	*1*	*Ashley*
Datz, Charles Percival	*P*	*2*	*Chicago*
Davidson, Charles Elmer	*P*	*1*	*St. Louis, Missouri*
Davis, Guy Brooks	*P*	*2*	*Abingdon*
Davis, Ray Robbins	*P*	*2*	*Abingdon*
Denson, Ernest Nichols	*P*	*1*	*Chicago*
Dewey, Everett William	*P*	*1*	*Lake Mills, Wisconsin*
DeWitt Charles Roy	*P*	*sp*	*Pocatello, Idaho*
Di Cosola, Anthony	*PC*	*1*	*Chicago*
Diesner, Herbert Otto	*P*	*1*	*Maywood*
Drais, Grover	*P*	*2*	*Onawa, Iowa*
DuBroff, William	*P*	*1*	*Chicago*
Eberly, Harry Leo	*P*	*2*	*Aurora*
Ehrhardt, Clarence	*P*	*1*	*Bellevue, Iowa*
Erickson, Elmer	*P*	*1*	*Chicago*
Esmond, Wendell R	*P*	*2*	*Maywood*
Faulkner, Raymond Earl	*P*	*2*	*Fulton*
Feldsher, Anna Clair	*P*	*1*	*Chicago*
Fox, Milton Mitchell	*P*	*sp*	*Chicago*
Fraser, Roy Fred	*P*	*2*	*Elizabeth*
French, Sidney Byington	*P*	*2*	*Lake Geneva, Wisconsin*
Friedl, William John	*P*	*2*	*Chicago*
Garrity, Vincent	*P*	*1*	*Spring Valley*
Gasen, Harry	*P*	*1*	*Chicago*
Geizpitz, Victor	*P*	*2*	*Chicago*
Glenn, Jacob F, LL.B. *(Univ. of Iowa)* 1901	*P*	*2*	*Chicago*
Goltermann, Richard William	*P*	*2*	*Forest Park*
Gordon, Samuel Michael	*P*	*sp*	*Chicago*
Gorham, Louis Andrew	*P*	*2*	*Chicago*
Graham, Frank	*P*	*1*	*Carlinville*
Greenwood, Robert Lee	*P*	*1*	*Chicago*
Grund, Charles Hugo, Jr.	*P*	*sp*	*Chicago*
Gustafson, Melsor Eugene	*P*	*sp*	*Chicago*
Haffner, Louis Leo	*P*	*2*	*Bloomington*
Hamrak, Mike	*P*	*sp*	*Chicago*
Hanichen, Carl William	*P*	*sp*	*Chicago*
Hansen, Arthur Leon	*P*	*2*	*Chicago*
Havranek, Charles Joseph	*P*	*sp*	*Chicago*
Harden, Leslie Eugene	*P*	*sp*	*Rockefeller*
Harvey, Roy Ernest	*P*	*1*	*Alma*
Hawthorne, Ralph	*P*	*2*	*Enfield*
Hayward, Claude Henry	*P*	*sp*	*Chicago*
Hojnacki, Sylvester Henry	*P*	*2*	*Chicago*
Holden, Edwin Cyrus	*P*	*1*	*Chicago*
Holmes, Bert Edward	*P*	*sp*	*Chicago*
Huhn, William	*P*	*sp*	*Chicago*
Imes, Ward Rupert	*P*	*1*	*Chicago*
Jacks, Alan Wallace	*P*	*1*	*Ottawa*
Jacobson, Michael	*P*	*2*	*Chicago*
Jaglowski, Anton Sylvester	*P*	*sp*	*Chicago*
Jindrich, George William	*P*	*2*	*Chicago*
Johnson, Archie Kirkwood	*P*	*2*	*Joliet*
Johnson, Oscar William	*P*	*2*	*Chicago*
Jordon, Thomas Michael	*P*	*sp*	*Chicago*
Kakacek, Joseph John	*P*	*2*	*Chicago*
Kanta, Harry	*P*	*2*	*Chicago*
Keefrey, Edward William	*P*	*sp*	*Chicago*
Korschak, James	*P*	*sp*	*Chicago*

Kozlowski, Roman Boleslaw	*P*	*sp*	*Chicago*
Kostka, Walter John	*P*	*1*	*Chicago*
Kral, Edward Joseph	*P*	*2*	*Chicago*
Krebs, Rudolph	*P*	*2*	*Milford*
Krueger, Armin Charles	*P*	*sp*	*Pekin*
Kvasnicka, Joseph Benjamin	*P*	*2*	*Chicago*
Larson, Clarence Oscar	*P*	*sp*	*Rock Island*
Leckband, Theodore August Joseph	*P*	*2*	*Grand Mound, Iowa*
Lemieux, Eloi Henry	*P*	*sp*	*Chicago*
Leo, Joseph Edward	*P*	*1*	*Chicago*
Lesko, Charles James	*P*	*2*	*Chicago*
Levinovitz, Leopold	*P*	*sp*	*Chicago*
Lipschultz, Minnie Pauline	*P*	*1*	*Chicago*
Litson, Will Carleton	*P*	*1*	*Romney, Indiana*
Lisec, Otto	*P*	*sp*	*Chicago*
Lowe, Charles Edward	*P*	*sp*	*Marion, Indiana*
Malick, Hike Moses	*P*	*1*	*Urumia, Persia*
Malkewicz, Stephen Edwin	*P*	*2*	*Chicago*
Marr, Leo George	*P*	*sp*	*Kankakee*
Marriott, Bates	*P*	*2*	*Galesburg*
Marsicano, Frank	*P*	*1*	*Melrose Park*
Marvel, Forest Elmer	*P*	*1*	*Fullerton, Nebraska*
Mawrence, Israei	*P*	*1*	*Chicago*
Masterson, Philip	*P*	*2*	*Clinton, Iowa*
Mazzei, Oratio	*P*	*1*	*Chicago*
McGurk, George Leo	*P*	*sp*	*Chicago*
McKenty, Arthur Henry	*P*	*2*	*Chicago*
McPherson, Andrew William	*P*	*sp*	*Chicago*
Metz, Harry	*P*	*sp*	*Chicago*
Miller, Carl Theodore	*P*	*1*	*Chicago*
Miller, Thomas	*P*	*1*	*Chicago*
Miller, William N	*PC*	*2*	*Waterloo, Iowa*
Mitchell, James	*P*	*sp*	*Ursa*
Mordente, Anthony Francis	*P*	*1*	*Chicago*
Mott, William Davis	*P*	*1*	*Princeton, Kentucky*
Mueller, Franklin Christopher	*P*	*2*	*Jefferson, Wisconsin*
Nelson, Hans Albin	*P*	*2*	*Peoria*
Nelson, James Cullent	*P*	*2*	*Houston, Texas*
Nemec, George Edward	*P*	*sp*	*Chicago*
Nesbitt, Orlo Floyd	*P*	*1*	*Quincy*
Neville, Mark Eldon	*P*	*2*	*Grayslake*
Newberry, George Morris	*P*	*1*	*Rock Island*
Nichols, Hiram Vanderbilt	*P*	*1*	*Chicago*
Niemeyer, Frank Charles	*P*	*2*	*Galena*
Nyberg, Carl Walter	*P*	*sp*	*Clinton, Iowa*
Obermiller, Oswald Edward Fred	*P*	*2*	*Galena*
Olson, George Ray	*P*	*sp*	*Chicago*
Ortmann, Albert Alvin	*PC*	*1*	*Kankakee*
Oveson, Iver Anton	*P*	*1*	*Chicago*
Paprocki, John Henry	*P*	*sp*	*Chicago*
Pelc, Joseph	*PC*	*2*	*Chicago*
Person, Frank Daniel	*P*	*2*	*Chicago*
Perzik, William Harry	*P*	*sp*	*Chicago*
Pieper, Henry Anthony	*P*	*1*	*Jacksonville*
Poli, Domingo	*P*	*2*	*Guayama, Porto Rico*
Porter, Lillian	*P*	*1*	*Chicago*
Rauschert, Emil Paul	*P*	*1*	*Lake Mills, Wisconsin*
Raycraft, Joseph Winfred	*P*	*2*	*Springfield*
Real, Dennis Bernard	*P*	*sp*	*Moline*
Rey, Young	*P*	*2*	*Soon Chun, Korea*
Reed, Robert Charles	*P*	*2*	*Robinson*
Riemer, Edwin Robert	*P*	*2*	*Chicago*
Ritter, William John	*P*	*2*	*Mattoon*
Ritzman, Robert	*P*	*2*	*Orangeville*
Rylander, Reuben August Ferdinand	*P*	*1*	*Joliet*
Sansone, Claude	*P*	*sp*	*Chicago*
Schemmel, Alfred Lawrence	*P*	*1*	*Dyersville, Iowa*
Schroeder, Albert Otto	*P*	*sp*	*Palatine*
Schultz, Ernest Christian	*P*	*1*	*Columbus, Wisconsin*
Scruggs, Edward Palmer	*PC*	*2*	*Livingston, Alabama*
Seeger, Harold Franklin	*P*	*2*	*Beardstown*
Sikucka, Jeanette Helen	*P*	*1*	*Chicago*
Simmons, Bayard Edwin	*P*	*2*	*Chicago*
Sikyta, Henry William	*P*	*1*	*Chicago*
Slinkard, Ernest Lee	*P*	*2*	*Grand Junction, Colorado*
Spalding, Clifford Rcss	*P*	*2*	*Clinton, Iowa*
Stahl, August Ferdinand	*P*	*2*	*Chicago*
Steffen, Edward Diedrich	*P*	*1*	*Whitefish, Montana*
Strain, Stewart	*P*	*2*	*Chicago*
Tate, William Mack	*P*	*1*	*Pine Bluff, Arkansas*
Templeton, James William	*P*	*1*	*Rockport, Missouri*
Thoroman, Ralph Rickey	*P*	*1*	*Mt. Sterling*
Throckmorton, Lloyd Earl	*P*	*sp*	*Peoria*

Trippett, Sidney Bradley	*P*	*1*	*Texarkana, Arkansas*
Turner, Henry Owen	*P*	*1*	*St. Louis, Missouri*
Underriner, Edwin Joseph	*P*	*1*	*Effingham*
Underwood, Ivan Johnson	*P*	*1*	*Clinton*
VanderBogart, Walter Alanson	*P*	*2*	*Wilmington*
Van Kempema, Richard	*P*	*1*	*Chicago*
Vlazny, John George	*P*	*1*	*Chicago*
Vorsanger, Lillian	*P*	*2*	*Chicago*
Waggoner, Athol Leonard	*P*	*2*	*Lynchburg, Tennessee*
Weaver, Robie Rolland	*P*	*1*	*Muncie, Indiana*
Weber, Paul Ernest	*P*	*sp*	*Herscher*
Weinstein, Charles	*P*	*1*	*Chicago*
Whitney, Guy Vernon	*P*	*1*	*Wenona*
Wiles, Clarence Edward	*P*	*sp*	*Kankakee*
Wischnia, Louis	*P*	*2*	*Chicago*
Woelffer, Roy William	*P*	*2*	*Lake Mills, Wisconsin*
Wokoun, Frank	*P*	*1*	*Chicago*
Wong, Tse Woon	*P*	*1*	*Hong Kong, China*
Zarobsky, Frank James	*P*	*sp*	*Chicago*
Zajicek, Adolph	*P*	*2*	*Chicago*
Zalubowski, Anton	*P*	*sp*	*Chicago*

DEGREES CONFERRED

1914

THE UNDERGRADUATE COLLEGES

Degrees of Bachelor of Arts, Bachelor of Literature, Bachelor of Science, and Bachelor of Music

Conferred June 17, 1914

Arthur Hildeman Aagard, Bachelor of Science (Mechanical Engineering)
Bertram Abney, Bachelor of Science (Agriculture)
Donald Winchester Acer, Bachelor of Arts (Liberal Arts)
Katharine Edith Acer, Bachelor of Arts (Liberal Arts)
Eugene Franklin Adams, Bachelor of Science (Architectural Engineering)
Joseph Franklin Adams, Bachelor of Science (Architectural Engineering)
William Albert Albrecht, A.B., 1911, Bachelor of Science (Agriculture)
Raymond Bean Albright, Bachelor of Arts (Liberal Arts)
John Leslie Alden, Bachelor of Science (Mechanical Engineering)
Sarah Louise Aleshire, Bachelor of Science (Agriculture)
Ruben C. Allen, Bachelor of Science (Agriculture)
Arthur Samuel Ambrose, Bachelor of Science (Agriculture)
Harlow Aydelott Amsbary, Bachelor of Science (Mechanical Engineering)
Emil Joseph Anderle, Bachelor of Science (Ceramics*)
Clarence Scott Anderson, Bachelor of Science (Agriculture)
John Henning Anderson, Bachelor of Science (Civil Engineering)
Rena Anderson, Bachelor of Arts (Liberal Arts)
Walter Seigfred Anderson, Bachelor of Science (Civil Engineering)
Chauncey Bliss Andrews, Bachelor of Science (Agriculture)
Charles Becht Anthony, Bachelor of Science (Architecture)
Charles Henry Apple, Bachelor of Science (Civil Engineering)
Albert Angelo Applegate, Bachelor of Arts (Liberal Arts)
Howard Clinton Arnold, Bachelor of Science (Ceramics*)
Clarence Marcellus Ashburn, Bachelor of Arts (Science)
Clara Mabel Attebery, Bachelor of Science (Agriculture)
Earl Kirkwood Augustus, Bachelor of Science (Agriculture)
John Madison Avery, Bachelor of Arts (Science)
Robert Mills Bailie, Bachelor of Science (Architecture)
Alice Elizabeth Baines, Bachelor of Arts (Liberal Arts)
Amelia West Baker, Bachelor of Arts (Liberal Arts)
Joseph Ladd Ballon, Bachelor of Science (Mechanical Engineering)
Harry Truman Barber, Bachelor of Science (Agriculture)
Phil Chase Barber, Bachelor of Science (Mechanical Engineering)
Clarence Barbre, Bachelor of Science (Chemistry*)
George Holbrook Bargh, Bachelor of Arts (Liberal Arts)
Nelle Elizabeth Barrick, Bachelor of Arts (Liberal Arts)
Henry Wilmont Bartling, Bachelor of Science (Electrical Engineering)
Federico Basadre, Bachelor of Science (Civil Engineering)
Glenn Wallace Bass, Bachelor of Science (Municipal and Sanitary Engineering)
Harry Lloyd Bauer, Bachelor of Science (Agriculture)
Leo Michael Bauer, Bachelor of Science (Architecture)
Arthur William Baumgarten, Bachelor of Science (Electrical Engineering)
Vaughn Butler Baxter, Bachelor of Science (Agriculture)
Amy Adaline Beach, Bachelor of Arts (Liberal Arts)
George Wilson Beattie, Bachelor of Arts, Bachelor of Science (Agriculture)
George Stanley Beaumont, Bachelor of Science (Agriculture)
Christopher Keeney Beebe, Bachelor of Arts (Science*)
Leo Richard Bell, Bachelor of Science (Mining Engineering)
Nuel Dinsmore Belnap, Bachelor of Arts (Liberal Arts*)
Harry Webb Benjamin, Bachelor of Arts (Science)
Merrill Glenn Benjamin, Bachelor of Science (Mechanical Engineering)
Louise Nancy Bennett, Bachelor of Arts (Liberal Arts)
Robert Lewis Pentley, Bachelor of Arts, Bachelor of Science (Agriculture)
Floyd Harrison Bergland, Bachelor of Science (Agriculture)
Adolph Bergman, Bachelor of Science (Mechanical Engineering)
Leslie Cosby Bernard, Bachelor of Science (Architecture)

*With thesis.

Edwards Hall Berry, Bachelor of Science (Electrical Engineering)
Fay Helen Bicknell, Bachelor of Science (Agriculture)
Walter Edward Bilhorn, Bachelor of Science (Civil Engineering)
John Earl Black, Bachelor of Science (Mechanical Engineering)
Frederick Jackson Blackburn, Bachelor of Science (Agriculture)
Earl Blaine Blough, Bachelor of Science (Civil Engineering)
Walter Joseph Blum, Bachelor of Science (Electrical Engineering)
Louis Angelo Boetigger, Bachelor of Arts (Liberal Arts)
Harold Benjamin Bolander, Bachelor of Science (Electrical Engineering)
George Ingels Boone, Bachelor of Science (Agriculture)
Samuel P Boonstra, Bachelor of Science (Architecture)
Kumudiui Kante Bose, Bachelor of Science (Mechanical Engineering)
Warren Edward Bow, Bachelor of Science (Ceramic Engineering*)
Walter Howard Boyer, Bachelor of Science (Civil Engineering)
Dorothy Mae Brayton, Bachelor of Arts (Science)
Lincoln Bales Breedlove, Bachelor of Science (Mechanical Engineering)
Wintress Brennan, Bachelor of Arts (Liberal Arts)
John Fred Breton, Bachelor of Science (Mechanical Engineering)
James Samuel Brock, Bachelor of Science (Agriculture)
Wayne Gottlieb Broehl, Bachelor of Arts (Liberal Arts)
Clifford Allen Brown, Bachelor of Science (Agriculture)
Edward Sutherland Brown, Bachelor of Science (Agriculture)
Horace Trowbridge Brown, Bachelor of Science (Civil Engineering)
Norman Ferdinand Brunkow, Bachelor of Arts (Liberal Arts)
Walter John Bublitz, Bachelor of Science (Civil Engineering)
Philip Eliot Buck, Bachelor of Science (Civil Engineering)
Adolph Otto Budina, Bachelor of Science (Architecture)
Michael Buhai, Bachelor of Science (Architectural Engineering)
Geraldine Alice Bullard, Bachelor of Arts (Liberal Arts)
Francis Henri Bulot, Bachelor of Science (Municipal and Sanitary Engineering)
Alice Amelia Bumstead, Bachelor of Science (Agriculture)
Mamie Bunch, Bachelor of Arts (Science)
Ralph William Bunge, Bachelor of Science (Mechanical Engineering)
Lyman Jesse Bunting, Bachelor of Science (Agriculture)
Carl Irven Burggraf, Bachelor of Science (Civil Engineering)
Ralph Burke, Bachelor of Science (Mechanical Engineering)
William Burnett, Jr., Bachelor of Science (Electrical Engineering)
Franklin Barnhart Burns, Bachelor of Arts (Liberal Arts)
Thomas Clifford Burwash, Bachelor of Arts (Liberal Arts)
Jewell Cecil Butler, Bachelor of Science (Electrical Engineering)
William Glenn Butler, Bachelor of Science (Agriculture)
Harley Marion Butt, Bachelor of Science (Civil Engineering)
Mark Adolph Buttonmaker, Bachelor of Science (Ceramics*)
Emma Bertha Butzow, Bachelor of Arts (Liberal Arts)
Harriet Anne Byrne, Bachelor of Arts (Science)
Grace Amelia Campbell, Bachelor of Arts (Liberal Arts)
Ruth Mae Canfield, Bachelor of Arts (Liberal Arts)
Gerald Vincent Carrier, Bachelor of Arts (Liberal Arts)
Pauline Adela Carrier, Bachelor of Music
Isaac Ray Carter, Bachelor of Arts (Liberal Arts)
Charles Findlay Cartwright, Bachelor of Science (Civil Engineering)
Sidney Casner, Bachelor of Arts (Liberal Arts)
Carlos Castelazo Castillo, Bachelor of Science (Railway Civil Engineering)
Dean Chase, Bachelor of Science (Municipal and Sanitary Engineering)
Katherine Truesdell Chase, Bachelor of Arts (Liberal Arts)
Leo Morelle Chesbrown, Bachelor of Science (Mechanical Engineering)
Ralph Cookman Chestnutt, Bachelor of Science (Mechanical Engineering)
Sung Shu Chien, Bachelor of Arts (Science)
Erwin Oltomar Christenson, Bachelor of Science (Architecture)
Bessie Fern Christopher, Bachelor of Science (Agriculture)
Tsin Chuang, Bachelor of Science (Architectural Engineering)
James Errol Churchill, Bachelor of Science (Electrical Engineering)
Stephen Thurston Claflin, Bachelor of Arts (Science)
Chester Arthur Clark, Bachelor of Science (Agriculture)
David Roland Clarke, Bachelor of Arts (Liberal Arts)
Ethel Clarke, Bachelor of Arts (Science)
Elizabeth Johanna Clausen, Bachelor of Science (Agriculture)
Leilla Belle Cleghorn, Bachelor of Arts (Liberal Arts)
Olen Robert Clements, Bachelor of Arts (Liberal Arts)
Mary Ella Climer, Bachelor of Arts (Science)
Bessie Florence Cline, Bachelor of Arts (Liberal Arts)
Lawrence Albert Cline, Bachelor of Science (Civil Engineering)
Frances Marion Cockrell, Bachelor of Science (Electrical Engineering)
Harry Ellsworth Codlin, Bachelor of Science (Agriculture)
Hazel Belle Coffey, Bachelor of Arts (Liberal Arts)
Alexander Cohn, Bachelor of Arts (Science)
James Rubin Colbert, Bachelor of Arts (Liberal Arts)
Hugh Leon Cole, Bachelor of Science (Agriculture)
Helen Bell Comstock, Bachelor of Arts (Liberal Arts)
Lourde Joseph Conboy, Bachelor of Science (Electrical Engineering)
Florence Avis Coultas, Bachelor of Arts (Liberal Arts)

*With thesis.

Arete Caroline Covey, Bachelor of Arts (Liberal Arts)
Anna Ethel Cox, Bachelor of Arts (Liberal Arts)
Rex Warfield Cox, Bachelor of Science (Agriculture)
Glenn Ewing Craft, Bachelor of Science (Agriculture)
Clara Gladys Cronk, Bachelor of Science (Agriculture)
Myrtle Amy Cruzan, Bachelor of Arts (Liberal Arts)
John Cutler, Bachelor of Science (Mechanical Engineering)
Rudolph Walter Cutshall, Bachelor of Science (Architecture)
Fred Erwin Dace, Bachelor of Science (Electrical Engineering)
Hewey Miller Dale, Bachelor of Arts (Liberal Arts)
Fred Henry Dallenbach, Bachelor of Science (Electrical Engineering)
Ralph Raymond Danielson, Bachelor of Science (Ceramics*)
Harry Otto Danz, Bachelor of Science (Mechanical Engineering)
Banesvar Dass, Bachelor of Science (Chemical Engineering*)
Hale Plahn Daugherty, Bachelor of Arts (Liberal Arts)
Alice Victoria Davenport, Bachelor of Arts (Liberal Arts)
Raymond Evan Davies, Bachelor of Arts (Science)
Thomas Andrew Davis, Bachelor of Science (Civil Engineering)
Beatrice Earle Dean, Bachelor of Arts (Liberal Arts)
Harold Burton Deets, Bachelor of Science (Agriculture)
Lemuel DeForest, Bachelor of Science (Mechanical Engineering)
Roy Van Liew DeMott, Bachelor of Arts (Liberal Arts)
Herbert Devine, Bachelor of Science (Mechanical Engineering)
Vivian Persis Dewey, Bachelor of Arts (Liberal Arts)
Mary Estella DeWolfe, Bachelor of Arts (Liberal Arts)
Lula Belle Dexter, Bachelor of Arts (Liberal Arts)
Harry Kimbal Dick, Bachelor of Science (Architectural Engineering)
Earl Burrus Dickerson, Bachelor of Arts (Liberal Arts)
Eva Dodds, Bachelor of Arts (Liberal Arts)
Edward Adelbert Doisy, Bachelor of Arts (Science*)
John Thomas Donahoe, Bachelor of Science (Electrical Engineering)
Elyzabeth Frances Donaldson, Bachelor of Arts (Science)
Raymond Thomas Douglas, Bachelor of Science (Mechanical Engineering)
George Harold Dubin, Bachelor of Science (Architecture)
Raymond Starr Dunham, Bachelor of Science (Agriculture)
Matthew Elbridge Dunlap, Bachelor of Science (Architectural Engineering)
William Guy Dunlap, Bachelor of Arts (Liberal Arts)
Jessie Fay Edmundson, Bachelor of Arts (Science)
George Curtis Ellis, Bachelor of Arts (Science)
Armin Elmendorf, Bachelor of Science (Mechanical Engineering)
Hubert Morton English, Bachelor of Arts (Science*)
Collistus James Ennis, Bachelor of Arts (Liberal Arts)
Ralph Lee Eyman, Bachelor of Science (Agriculture)
Daniel Baldwin Fager, Bachelor of Arts (Liberal Arts)
Helen Fairfield, Bachelor of Arts (Liberal Arts)
Myerlin Stein Fallis, Bachelor of Science (Architectural (Engineering)
Samuel James Farlow, Bachelor of Science (Architectural Engineering)
Leslie William Faulkner, Bachelor of Science (Electrical Engineering)
Mary Emma Felter, Bachelor of Arts (Liberal Arts)
John Moffat Fetherson, Bachelor of Science (Railway Electrical Engineering)
Frank Christian Feutz, Bachelor of Science (Civil Engineering)
William Fuller Fielder, Bachelor of Arts (Science)
Elmer Ellsworth Fiero, Bachelor of Arts (Liberal Arts)
Henry Lawrence Fischer, Bachelor of Science (Mechanical Engineering)
Walter Lloyd Fisher, Bachelor of Science (Railway Civil Engineering)
Cassius Paul Fletcher, Bachelor of Science (Civil Engineering)
John Archibald Fletcher, Bachelor of Science (Agriculture)
Edmond Roy Foster, Bachelor of Science (Architectural Engineering)
Ora French Foster, Bachelor of Science (Agriculture)
Lester Eugene Frailey, Bachelor of Arts (Liberal Arts)
William Leonard Frank, Bachelor of Arts (Science), Bachelor of Science (Agriculture)
Russell Card Frazee, Bachelor of Science (Agriculture)
James B. Frazier, Jr., Bachelor of Science (Agriculture)
Henry Helm French, Bachelor of Science (Railway Mechanical Engineering)
Ralph Waldo French, Bachelor of Science (Agriculture)
George Elmore Gable, Bachelor of Science (Architecture)
Albert Macy Gaddis, Bachelor of Science (Electrical Engineering)
Robert Percy Gage, Bachelor of Science (Agriculture)
Anna Marie Gallagher, Bachelor of Arts (Liberal Arts)
Donald Tunnicliffe Gamble, Bachelor of Science (Agriculture)
James Franklin Garrett, Bachelor of Science (Chemical Engineering*)
Della Alice Gaskill, Bachelor of Arts (Science)
Helen Beatrice Gere, Bachelor of Arts (Liberal Arts)
Roy Lyle Getman, Bachelor of Science (Civil Engineering)
Frederick John Giehler, Bachelor of Science (Architectural Engineering)
Mary Elsie Gildersleeve, Bachelor of Arts (Science)
Leonard Wood Glover, A.B., 1912, Bachelor of Music
Philip Hilton Goldberg, Bachelor of Arts (Science)
Rae Goldman, Bachelor of Arts (Liberal Arts)
Albert Gonsior, Bachelor of Science (Civil Engineering)
Leone Ione Goodman, Bachelor of Arts (Liberal Arts)

*With thesis.

Helen Winifred Grant, Bachelor of Arts (Liberal Arts)
George Manners Grantham, Bachelor of Science (Agriculture)
Bertha Agnes Green, Bachelor of Music
Arthur Ritchie Greene, Bachelor of Science (Agriculture)
Erwin Griesbaum, Bachelor of Science (Mechanical Engineering)
William Leroy Griffin, Bachelor of Arts (Liberal Arts)
Clarence Fatrick Griffith, Bachelor of Science (Architectural Engineering)
Avis Gwinn, Bachelor of Arts (Liberal Arts)
Richard Hartloff Habbe, Bachelor of Arts (Liberal Arts)
Stanley Bear Haddon, Bachelor of Science (Mechanical Engineering)
Russell Pritchett Hall, Bachelor of Science (Agriculture)
Thomal Dennison Hall, A.B., Bachelor of Science (Agriculture)
Ruth Halliday, Bachelor of Arts (Liberal Arts)
Elijah Robert Hatowski, Bachelor of Science (Electrical Engineering)
Paul Albert Handke, Bachelor of Science (Ceramics*)
Ernest, Floyd Hanes, Bachelor of Arts (Liberal Arts)
Helen Leigh Hanes, Bachelor of Arts (Science)
Orville Gerber Hankins, Bachelor of Science (Agriculture)
Mabel Laurine Hansen, Bachelor of Science (Agriculture)
Roy Hansen, Bachelor of Science (Agriculture)
Roy Walfred Hansen, Bachelor of Science (Architectural Engineering)
Ralph Wilbur Hardinger, Bachelor of Arts (Science)
Harris Jacob Harman, Bachelor of Science (Civil Engineering)
Edward Clarke Harper, Bachelor of Science (Architecture)
Hannah Jewel Harris, Bachelor of Arts (Liberal Arts)
Margaret Ray Harris, Bachelor of Arts (Liberal Arts)
William Harris, Bachelor of Arts (Liberal Arts)
Paul Mathew Hart, Bachelor of Science (Electrical Engineering)
Nelle Mae Hartsock, Bachelor of Arts (Liberal Arts)
Edwin Laurie Hasker, Bachelor of Arts (Liberal Arts)
Alice Ruth Hatch, Bachelor of Arts (Science)
Alfred DeWitt Hawley, Bachelor of Arts (Science)
Paul Hayhurst, A.B., (University of Missouri) 1904, Bachelor of Science (Agriculture)
August George Hecht, Bachelor of Science (Agriculture)
Emil Nicholas Heidkamp, Bachelor of Science (Civil Engineering)
Fred Henderson, Bachelor of Science (Agriculture)
Henry Harrison Henline, Bachelor of Science (Electrical Engineering)
Thomas McDonald Hepburn, Bachelor of Science (Civil Engineering)
Carrie Belle Herdman, Bachelor of Arts (Science)
Charles Brown Hershey, Bachelor of Arts (Liberal Arts)
Caroline Elizabeth Hesselbaum, Bachelor of Arts (Liberal Arts)
Max Brown Higgins, Bachelor of Science (Architectural Engineering)
Charles Frances Hill, Bachelor of Arts (Science)
Chauncey Stevens Hill, Bachelor of Science (Agriculture)
John William Hill, Bachelor of Science (Civil Engineering)
Wilma Marie Hill, Bachelor of Arts (Liberal Arts)
Arthur Burgess Hillman, Bachelor of Science (Civil Engineering)
Hazel Elizabeth Hinshaw, Bachelor of Arts (Liberal Arts)
Jackson Edward Hirschl, Bachelor of Science (Architecture)
Axel Magnus Hjort, Bachelor of Arts (Science*)
William Brooks Hodgins, Bachelor of Science (Mechanical Engineering)
Frank Joseph Hoffman, Bachelor of Science (Architecture)
Walter Eeward Holmes, Bachelor of Science (Municipal and Sanitary Engineering)
Arthur Parker Holt, Bachelor of Science (Agriculture)
Frankie Lee Holton, Bachelor of Arts (Liberal Arts)
Ferdinand Homann, Bachelor of Arts (Science), Bachelor of Science (Agriculture)
Isabel Hoover, Bachelor of Arts (Liberal Arts)
Elliott Budd Hopkins, Bachelor of Science (Mechanical Engineering)
Roy Arthur Horning, Bachelor of Science (Ceramics*)
Louis Julius Horwich, Bachelor of Science (Architecture)
Helen Elizabeth Hough, Bachelor of Arts (Liberal Arts)
John Smith Housman, Bachelor of Science (Mining Engineering)
Edward Gardiner Howe, Jr., Bachelor of Science (Agriculture)
Herbert Edward Howes, Bachelor of Science (Agriculture)
Tsung Han Hsu, Bachelor of Arts (Science)
Cecil A Hughes, Bachelor of Science (Agriculture)
James Albert Hunter, Bachelor of Arts (Liberal Arts)
Ruth Hutchinson, Bachelor of Arts (Liberal Arts)
Nobtaro Inagaki, Bachelor of Arts (Liberal Arts*)
Eda Auguste Jacob, Bachelor of Arts (Liberal Arts)
Marvin Edward Jahr, A.B., (University of Wisconsin) 1905, Bachelor of Science (Agriculture)
John Moller Janson, Bachelor of Arts (Science*)
Dorette Thayer John, Bachelor of Arts (Liberal Arts)
Wilford Espin Johns, Bachelor of Science (Agriculture)
Robert Carl Johnson, Bachelor of Arts (Liberal Arts)
Robert Ulysses Johnson, Bachelor of Science (Architectural Engineering)
Herbert W Jory, Bachelor of Science (Architecture)
Chen Chi Kan, Bachelor of Arts (Liberal Arts)
Roy Alexander Kane, Bachelor of Science (Architecture)
Frank Joseph Karcher, Bachelor of Arts (Science)
Henry Gilbert Karges, Bachelor of Science (Architectural Engineering)

*With thesis.

Robert Ferdinand Kaun, Bachelor of Science (Electrical Engineering)
Arch Floyd Keehner, Bachelor of Science (Civil Engineering)
Bessie Opal Keller, Bachelor of Arts (Liberal Arts)
Ralph Leveratt Kelley, Bachelor of Science (Architecture)
Frederick Newcomb Kenyon, Bachelor of Science (Agriculture)
Oscar B Kercher, Bachelor of Science (Civil Engineering)
Otis Kercher, Bachelor of Science (Agriculture)
Esther Allen Kern, Bachelor of Arts (Liberal Arts)
Paul Francis Kerrigan, Bachelor of Arts (Science)
Albert Eugene Kidd, Bachelor of Arts (Liberal Arts)
Hubert St. Clair Kilby, Bachelor of Science (Electrical Engineering)
Florence Beeson King, Bachelor of Science (Agriculture)
Wayne Isaac Kirby, Bachelor of Science (Architecture)
George Godwin Kirk, Bachelor of Science (Agriculture)
Annirene Kirkland, Bachelor of Arts (Liberal Arts)
Frank Allen Kirkpatrick, Bachelor of Science (Ceramic Engineering*)
Nell Ruth Kirkpatrick, Bachelor of Arts (Liberal Arts)
George Minnie Klein, Bachelor of Arts (Science)
Bernie Lloyd Kleinshrodt, Bachelor of Science (Agriculture)
Elizabeth Knowlton, Bachelor of Arts (Liberal Arts)
Miriam Knowlton, Bachelor of Arts (Liberal Arts)
Philetus Clarke Knowlton, Jr., Bachelor of Science (Architecture)
Vi Tsing Koo, Bachelor of Science (Electrical Engineering)
Sam Korshak, Bachelor of Science (Architecture)
Edward Max Krabbe, Bachelor of Science (Railway Electrical Engineering)
Tsong-Lin Ku, Bachelor of Arts (Liberal Arts*)
Henry Harrison Kuhn, Bachelor of Science (Mechanical Engineering)
Edith Jane Lamb, Bachelor of Arts (Liberal Arts)
Herbert Updike Landon, Bachelor of Science (Agriculture)
Etta Mabel Lantz, Bachelor of Arts (Liberal Arts)
Eva Lillian Larson, Bachelor of Arts (Liberal Arts)
Joseph Conrad Lawless, Bachelor of Science (Agriculture)
Ernest Lawrence, Bachelor of Science (Agriculture)
Ying Nan Lee, Bachelor of Arts (Liberal Arts)
Willis Leriche, Bachelor of Science (Mining Engineering)
Clara Vesta Lewis, Bachelor of Arts (Liberal Arts)
Laura Louise Lewis, Bachelor of Science (Agriculture)
Leslie Alvin Liggett, Bachelor of Science (Civil Engineering)
Lewis S Linder, Bachelor of Arts (Science)
Bess Mae Lindley, Bachelor of Arts (Liberal Arts)
Oscar Lippman Liss, Bachelor of Science (Civil Engineering)
Wallace Bright Livesay, Bachelor of Science (Architectural Engineering)
Asuncion V Lopez, Bachelor of Science (Civil Engineering)
John Edwin Louis, Bachelor of Science (Municipal and Sanitary Engineering)
Paul Elton Lower, Bachelor of Science (Agriculture)
Coen L Luckett, Bachelor of Arts (Science*)
Erwin Moses Lurie, Bachelor of Science (Civil Engineering)
Roy Jacobs Lyons, Bachelor of Science (Agriculture)
Claude Lee McCabe, Bachelor of Arts (Liberal Arts)
Kenneth Alexander McCaskill, Bachelor of Science (Agriculture)
Louis Douglas McCaughey, Bachelor of Science (Electrical Engineering)
Isaac Marion McConnel, Bachelor of Science (Agriculture)
Elmer McCormick, Bachelor of Science (Mechanical Engineering)
Howard Orr McCracken, Bachelor of Science (Agriculture)
James Edward William McDonald, Bachelor of Science (Mining Engineering)
Ellis Dean McFarland, Bachelor of Science (Agriculture)
Edna Amelia McGee, Bachelor of Arts (Liberal Arts)
James Miles McGrath, Bachelor of Arts (Science)
Katherine Leslie McGraw, Bachelor of Arts (Liberal Arts)
Olivette C McKee, Bachelor of Arts (Science)
James William McLaughlin, Bachelor of Science (Mechanical Engineering)
Thomas Newkirk McVay, Bachelor of Science (Ceramic Engineering*)
Daniel Valentine McWethy, Bachelor of Arts (Liberal Arts)
Clayton Lee Malaise, Bachelor of Science (Electrical Engineering)
Edith Melvina Mann, Bachelor of Arts (Liberal Arts)
DuBois Marquis, Bachelor of Science (Agriculture)
Robert Haskell Marshall, Bachelor of Arts (Science)
Aaron Mathers, Bachelor of Arts (Liberal Arts*)
William Brashear Mattingly, Bachelor of Science (Agriculture)
Charles Fontaine Maury, Bachelor of Science (Architecture)
Thomas Edward Maury, Bachelor of Science (Mechanical Engineering)
Arthur Franklin Mellen, Bachelor of Arts (Science)
Ina Valeria Meredith, Bachelor of Arts (Science)
Thompson Arlene Merrill, Bachelor of Arts (Liberal Arts)
Marshall Crittendon Merrills, Bachelor of Arts (Liberal Arts*)
George Meyer, Jr., Bachelor of Science (Mechanical Engineering)
Joseph Porter Miles, Bachelor of Science (Agriculture)
Clayton Allen Miller, Bachelor of Science (Electrical Engineering)
Marcus Gilbert Miller, Bachelor of Science (Architecture)
Olive Fiedele Miller, Bachelor of Arts (Liberal Arts)
Minnie Isabel Milne, Bachelor of Arts (Science)
Lester Ward Miner, Bachelor of Science (Agriculture)

*With thesis.

Helen Mitchell, Bachelor of Arts (Liberal Arts)
Gundayu Mizoguchi, Bachelor of Science (Electrical Engineering)
Robert Burrell Moir, Bachelor of Science (Civil Engineering)
Margaret Ellen Molt, Bachelor of Arts (Liberal Arts)
Ruby Frances Moore, Bachelor of Arts (Liberal Arts)
Charles Leonard Morgan, Bachelor of Science (Architecture)
Grace Busey Morgan, Bachelor of Arts (Liberal Arts)
Donald Kenneth Morrison, Bachelor of Arts (Science)
Jessie Morse, Bachelor of Arts (Liberal Arts)
Harrie Stevens Mueller, Bachelor of Science (Agriculture)
Charles Stewart Mulvaney, Bachelor of Science (Civil Engineering)
Milton Murr, Bachelor of Science (Civil Engineering)
Odessa Madge Myers, Bachelor of Arts (Liberal Arts*)
Marcella Elizabeth Adalaide Nagel, Bachelor of Science (Agriculture)
Frank Joseph Naprstek, Bachelor of Science (Architectural Engineering)
Myer Oscar Nathan, Bachelor of Arts (Science), Bachelor of Science (Architecture)
Dora Myrtle Nebel, Bachelor of Arts (Liberal Arts)
Helen Montgomery Needler, Bachelor of Science (Agriculture)
Peter Swan Nelson, Bachelor of Science (Mechanical Engineering)
Tsunyoong, New, Bachelor of Science (Agriculture)
Naomi Olive Newburn, Bachelor of Arts (Liberal Arts)
George Arthur Newell, Jr., Bachelor of Arts (Liberal Arts*)
Frances Alcetta Nichol, Bachelor of Arts (Liberal Arts)
John Minert Nickelsen, Bachelor of Science (Mechanical Engineering)
John Eliot Noon, Bachelor of Arts (Liberal Arts)
Edwin Francis Noth, Bachelor of Science (Architecture)
Alleen Hall O'Bar, Bachelor of Arts (Liberal Arts)
Agnes Mildred Olson, Bachelor of Arts (Liberal Arts)
Arthur Henry Orcutt, Bachelor of Arts (Science), Bachelor of Science (Agriculture)
Benito Rene Ordonez, Bachelor of Science (Railway Electrical Engineering)
Lelia Mae Ormsby, Bachelor of Arts (Science*)
Clarence Orr, Bachelor of Arts (Liberal Arts)
Harold Vaughan Okr, Bachelor of Science (Electrical Engineering)
Mary Elizabeth Orr, Bachelor of Arts (Liberal Arts)
Leland George Osborn, Bachelor of Arts (Science)
Harold Paul Ousley, Bachelor of Arts (Liberal Arts*)
Raymond William Owens, Bachelor of Science (Electrical Engineering)
Olive Allen Paine, Bachelor of Arts (Science)
Julius Clark Palmer, Bachelor of Science (Electrical Engineering)
John Wallace Park, Bachelor of Science (Architecture)
Helen Lucy Parker, A.B., 1913, Bachelor of Music
Earle Henderson Parkins, Bachelor of Science (Agriculture)
Lloyd Herman Pasewalk, Bachelor of Science (Civil Engineering)
Veda Louise Payne, Bachelor of Arts (Science)
Earl D Peadro, Bachelor of Science (Civil Engineering)
William McCord Peeples, Bachelor of Arts (Science)
Carry May Pervier, Bachelor of Arts (Liberal Arts)
Hilding Cunard Reynolds Peterson, Bachelor of Science (Mechanical Engineering)
John Carne Phelps, Bachelor of Science (Mechanical Engineering)
John Joseph Pitts, Jr., Bachelor of Arts (Liberal Arts)
Theodore Plack, Bachelor of Science (Civil Engineering)
Catherine Melvina Planck, Bachelor of Science (Agriculture)
Casper Platt, Bachelor of Arts (Liberal Arts)
Paul Wright Pogue, Bachelor of Arts (Liberal Arts)
Leila Jean Pollard, Bachelor of Science (Agriculture)
Harry Robb Pollock, Bachelor of Science (Agriculture)
Antonio Portuando y Miyares, Bachelor of Science (Agriculture)
Mertie Amalia Postel, Bachelor of Arts (Liberal Arts)
Floyd Emerson Poston, Bachelor of Arts (Science)
Leroy Tallman Powers, Bachelor of Science (Agriculture)
Anton Prasil, Bachelor of Science (Chemical Engineering*)
Paul Rudolph Arctander Preus, Bachelor of Science (Civil Engineering)
Edwin Chester Prouty, Bachelor of Science (Civil Engineering)
William Sing-Chong Pung, Bachelor of Science (Railway Civil Engineering)
George Edward Quirck, Bachelor of Science (Architectural Engineering)
Bernice Mae Quinn, Bachelor of Arts (Liberal Arts)
Leonidas Willing Ramsey, Bachelor of Science (Agriculture)
Hallie Burnside Randolph, Bachelor of Science (Agriculture)
Carl King Rang, Bachelor of Arts (Liberal Arts)
Benjamin Julius Rappaport, Bachelor of Science (Architectural Engineering)
Alfred Raut, Bachelor of Science (Agriculture)
Carl Eric Redborg, Bachelor of Arts (Liberal Arts)
Herman Thornton Reeves, Bachelor of Science (Agriculture)
Ernest Alexander Reid, Bachelor of Science (Electrical Engineering)
Raymond Thomas Reilly, Bachelor of Science (Municipal and Sanitary Engineering)
Robert Rutter Reimert, Jr., Bachelor of Science (Architectural Engineering)
Sylvia Pearl Renner, Bachelor of Science (Agriculture)
Ruth Margaret Renwick, Bachelor of Arts (Liberal Arts)
Daphne Margaret Rexwinkle, Bachelor of Music
Grover Colvin Rice, Bachelor of Arts (Science)
Hugh Monroe Rice, Bachelor of Science (Agriculture)
Paul Cobb Rich, Bachelor of Science (Chemical Engineering*)

*With thesis.

Helen Marie Richards, Bachelor of Arts (Science*)
Charles Richardson, Bachelor of Science (Agriculture)
Frank Erwin Richart, Bachelor of Science (Civil Engineering)
Friedel Chapin Richey, Bachelor of Science (Agriculture)
David Morris Riff, Bachelor of Science (Civil Engineering)
Jules Henry Robert, Bachelor of Science (Mechanical Engineering)
Erma Dorothy Roberts, Bachelor of Science (Agriculture)
Kenneth Edward Rockhold, Bachelor of Science (Ceramic Engineering*)
Alfred Robert Rohlfing, Bachelor of Arts (Liberal Arts)
Vern Anton Rowland, Bachelor of Science (Architectural Engineering)
Oscar Roman, Bachelor of Science (Agriculture)
Carrie Lee Rooth, Bachelor of Arts (Liberal Arts)
Wilfred Crouch Ropiequet, Bachelor of Arts (Liberal Arts)
Glenn Thompson Ross, Bachelor of Arts (Liberal Arts)
Jessie Blanche Rothgeb, Bachelor of Arts (Liberal Arts)
Enos Marion Rowe, Bachelor of Science (Agriculture)
Floyd Elba Rowland, Bachelor of Arts (Science)
Surya Kanta Roy, Bachelor of Science (Agriculture)
John Garland Ruckel, Bachelor of Science (Agriculture)
Nondas Caroline Russel, Bachelor of Arts (Liberal Arts)
Jose Urbana Salazar, Bachelor of Science (Agriculture)
Laura Marie Sanders, Bachelor of Arts (Science)
Ralph Lloyd Sanders, Bachelor of Science (Civil Engineering)
Lillian Waters Savage, Bachelor of Arts (Liberal Arts)
Margaret Sawyer, Bachelor of Science (Agriculture)
Walter Howard Scales, Bachelor of Science (Architectural Engineering)
Emil Ferdinand Schaarman, Bachelor of Arts (Liberal Arts)
Mabel Eva Schadt, Bachelor of Arts (Science)
Otto George Schaffer, Bachelor of Science (Agriculture)
Emma Eugenie Schaller, Bachelor of Arts (Liberal Arts)
Emil Paul Schreier, Bachelor of Science (Architecture)
Glenn Wilson Schroeder, Bachelor of Science (Agriculture*)
Hazel Marguerite Schultz, Bachelor of Science (Agriculture)
Ernest Somers Scott, Bachelor of Science (Electrical Engineering)
Ogle Hesse Sears, Bachelor of Science (Agriculture)
Edmund Clay Secor, Bachelor of Science (Agriculture)
Esther Beulah Seeley, Bachelor of Arts (Liberal Arts)
Sentaro Sekine, Bachelor of Arts (Liberal Arts)
Sidney Isaac Sewell, Bachelor of Science (Ceramic Engineering*)
Earl Page Shapland, Bachelor of Science (Mechanical Engineering)
Bertha Lee Sharp, Bachelor of Arts (Liberal Arts*)
Frank Thomas Sheets, Bachelor of Science (Municipal and Sanitary Engineering)
Warren Maxwell Sheldon, Bachelor of Science (Agriculture)
Wilma Loy Shelton, Bachelor of Arts (Liberal Arts)
James Douglass Shepperd, Bachelor of Science (Electrical Engineering)
William Davis Shipman, Bachelor of Science (Civil Engineering)
Fred Glen Shoemaker, Bachelor of Science (Electrical Engineering)
Nim Chi Shum, Bachelor of Science (Chemistry*)
Harry George Shurecht, Bachelor of Science (Ceramics*)
Carl William John Sievert, Bachelor of Science (Chemical Engineering*)
Wilfred Carl Sigerson, Bachelor of Arts (Liberal Arts)
John Lawrence Simonich, Bachelor of Science (Electrical Engineering)
John Knox Skinner, Bachelor of Arts (Science)
Frank Clifton Slater, Bachelor of Arts (Liberal Arts)
Robert LeRoy Smart, Bachelor of Science (Civil Engineering)
Frank John Smejkal, Bachelor of Science (Agriculture)
Charles Roger Smith, Bachelor of Science (Agriculture)
Donald Jenks Smith, Bachelor of Science (Electrical Engineering)
Marquis Joseph Smith, Bachelor of Science (Agriculture)
Reuel Lhamon Smith, Bachelor of Science (Mechanical Engineering)
Robert Smith, Jr., Bachelor of Science (Mechanical Engineering)
Stanley Christopher Smith, Bachelor of Arts (Liberal Arts*)
Wilson Marshall Smith, Bachelor of Arts (Liberal Arts)
Albert Thornton Smithson, Bachelor of Science (Architecture)
Logan Abraham Snyder, Bachelor of Science (Agriculture)
Elsie Travilla Spear, Bachelor of Science (Science)
Louis Wolfgang Sporlein, Bachelor of Science (Architectural Engineering)
Harold Greene Sprague, Bachelor of Science (Architecture)
Herbert Stanley Levin Stafford, Bachelor of Science (Mining Engineering)
Myrtle Lois Stahl, Bachelor of Arts (Liberal Arts)
Lawrence Vincent Starkey, Bachelor of Science (Agriculture)
Bernice Fallis Starr, Bachelor of Arts (Liberal Arts)
Carl Garner Stearns, Bachelor of Arts (Liberal Arts)
Lottie Emily Steele, Bachelor of Arts (Liberal Arts)
Hubert Vincenz Stephenson, Bachelor of Science (Civil Engineering)
Raymond Monroe Stevens, Bachelor of Science (Architecture)
Lavina Shriver Stinson, Bachelor of Arts (Liberal Arts)
Tom Candy Stone, Bachelor of Science (Agriculture)
Judith Elsie Streed, Bachelor of Arts (Liberal Arts)
Harry Danford Strong, Bachelor of Science (Agriculture)
William Augustus Strong, Bachelor of Arts (Science)
Emily Kingman Sunderland, Bachelor of Arts (Liberal Arts)

*With thesis.

Izzet Basile Survier, Bachelor of Science (Agriculture)
Earl Ray Suter, Bachelor of Science (Electrical Engineering)
Frederick Curtis Swanson, Bachelor of Arts (Liberal Arts*)
Leslie Wells Swett, Bachelor of Science (Mining Engineering)
Frank Taggart, Jr., Bachelor of Science (Agriculture)
Alexander Eli Tarbacciano, Bachelor of Science (Electrical Engineering)
James Alfred Tate, Bachelor of Science (Agriculture)
Margaget Taylor, Bachelor of Arts (Liberal Arts)
Henry Raymond Tear, Bachelor of Science (Electrical Engineering)
Kwang-tang Teng, Bachelor of Arts (Liberal Arts)
John Mifflin Thomas, Bachelor of Science (Mechanical Engineering)
Lyle Thomas, Bachelor of Arts (Liberal Arts)
Melvin Thomas, Bachelor of Science (Agriculture)
Charles Henry Thompson, Bachelor of Science (Civil Engineering)
Harold Earle Thompson, Bachelor of Science (Electrical Engineering)
Douglas DeForrestt Tibbits, Bachelor of Science (Agriculture)
Kenneth Dale Tilton, Bachelor of Science (Mechanical Engineering)
George Leiner Titus, Bachelor of Arts (Liberal Arts)
Edward Fritchoff Torgerson, Bachelor of Science (Agriculture)
Harry Shults Tressel, Bachelor of Arts (Liberal Arts)
Leon Alvin Triggs, Bachelor of Arts (Liberal Arts)
Frances Helen Trost, Bachelor of Arts (Liberal Arts)
Phoebe Caroline Tucker, Bachelor of Arts (Liberal Arts)
Bessie Irene Turner, Bachelor of Arts (Liberal Arts)
Frank Turner, Bachelor of Science (Agriculture)
Rhodolphus Kibbe Turner, Bachelor of Science (Agriculture)
John Kline Tuthill, Bachelor of Science (Electrical Engineering)
Mildred May Van Cleve, Bachelor of Arts (Science)
Henry Pierce Vandercook, Bachelor of Science (Agriculture)
Frank Eugene Van Doren, Bachelor of Science (Agriculture)
Mark Albert Van Doren, Bachelor of Arts (Liberal Arts*)
Charles R. Velzy, Bachelor of Science (Mechanical Engineering)
Elizabeth Ann Voss, Bachelor of Science (Agriculture)
Winthrop Madison Wadsworth, Bachelor of Science (Architectural Engineering)
Alvin Louis Wagner, Bachelor of Arts (Liberal Arts)
Charles Louis Walduck, Bachelor of Science (Ceramic Engineering*)
Victoria Pamilla Walkerly, Bachelor of Arts (Liberal Arts)
Mabel Clare Wallace, Bachelor of Science (Agriculture)
Jesse Noble Walters, Bachelor of Science (Agriculture)
Madge Virginia Ward, Bachelor of Arts (Liberal Arts)
Vernon Huff Warfield, Bachelor of Arts (Liberal Arts)
Charles Willis Warinner, Bachelor of Science (Mechanical Engineering)
Frank Baker Warren, Bachelor of Science (Civil Engineering)
Enos Waters, Bachelor of Science (Agriculture)
Perley Melvin Watson, Bachelor of Arts (Liberal Arts)
Mildred Ruth Way, Bachelor of Arts (Liberal Arts)
Rayburn Stokes Webb, Bachelor of Science (Architecture)
Albert Webber, Bachelor of Arts (Liberal Arts)
Harry Clayton Webster, Bachelor of Science (Civil Engineering)
Edward Roy Wells, Bachelor of Science (Civil Engineering)
Wallace Moorehead Welty, Bachelor of Science (Agriculture)
Henry August deWerff, Bachelor of Science (Agriculture)
Clifford Harper Westcott, Bachelor of Science (Civil Engineering)
Arthur Theodore Weydell, Bachelor of Science (Mechanical Engineering)
Frank Leon White, Bachelor of Science (Mechanical Engineering)
Laura Gwendolen Whitmire, Bachelor of Arts (Liberal Arts)
Sarah Jane Whittenberg, Bachelor of Arts (Liberal Arts)
Minna Luella Wickoff, Bachelor of Arts (Liberal Arts)
Anton Henry Wiebmer, Bachelor of Science (Electrical Engineering)
Raymond Harvey Wilkins, Bachelor of Science (Agriculture)
Earl Clinton Williams, Bachelor of Science (Electrical Engineering)
Bernice Celia Wilson, Bachelor of Arts (Liberal Arts)
James Aiken Wilson, Bachelor of Science (Railway Mechanical Engineering)
Norman Kenneth Wilson, Bachelor of Science (Civil Engineering)
Samuel Victor Winquist, Bachelor of Arts (Liberal Arts*)
George Hyde Wittenburg, Bachelor of Science (Architecture)
Dean Parkhurst Woleben, Bachelor of Science (Civil Engineering)
Clarence Jacob Wolff, Bachelor of Arts (Liberal Arts)
Jesse John Woltmann, Bachelor of Science (Civil Engineering)
Harry Gardner Wood, Bachelor of Science (Electrical Engineering)
James Ellsworth Wooters, A.M., 1913, Bachelor of Science (Agriculture)
Leland Magness Wooters, Bachelor of Arts (Liberal Arts)
Grace Lucile Worrell, Bachelor of Arts (Science)
Bernice Wright, Bachelor of Arts (Liberal Arts)
Minnie Roberta Wright, Bachelor of Arts (Liberal Arts)
Carl Stanley Wyant, Bachelor of Science (Architecture)
Bertha Alice Wykle, Bachelor of Arts (Liberal Arts)
John Jonathan Yoke, Bachelor of Science (Agriculture)
Arthur Erwin Young, A.B. (Northwestern University) 1906, Bachelor of Science (Agriculture)
Jeshine Zohn Zee, Bachelor of Science (Electrical Engineering)
Eugene William Zeppenfeld, Bachelor of Science (Agriculture)

*With thesis.

THE COLLEGE OF LAW

The Degree of Bachelor of Laws

Herbert Franklin Brannon
Holland Mullikin Cassidy
George Cleveland Coffey
Arthur Vernon Essington
Chancy Lawrence Finfrock
Benjamin Sidney Fisher
Harold James Howe
Joseph Alfred Huston
Raymond Blaine Kessler
Bonum Lee Kirk
William Hamilton Lee
Wallace Willis Mehl
Walter Witchell Mercer
Carl Wesley Mulfinger
Stanley Landon Pogue
Frank Dilling Shobe
Fred Minton Stambaugh
Roger Lewis Stephens
Arthur Crist Strong
Claude Magnus Swanson
Grover W. Watson
John Wilson White

The Degree of Doctor of Law

William Everett Britton, A.M., 1910
Walter Charles Lindley, A.B., 1901, LL.B., 1904
Thomas Walter Samuels, A.B., 1909, A.M., 1912

THE LIBRARY SCHOOL

The Degree of Bachelor of Library Science

Elizabeth Hamilton Davis, A.B., *Illinois Woman's College*, 1909
Stella Belle Galpin, A.B., *Knox College*, 1911
Louise Fenimore Schwartz, A.B., *Knox College*, 1907
Rose Roberts Sears, A.B., *Fairmount College*, 1909
Sabra Elizabeth Stevens, A.B., *University of Illinois*, 1906

Members of classes from 1872 to 1891 who received certificates on graduation and upon whom is now conferred the Degree of Bachelor of Letters or Bachelor of Science.

Albert Bellamy, Bachelor of Science
Comma Nathaniel Boyd, Bachelor of Science
William Burron Braucher, Bachelor of Science
Lilly O. Bronson, Bachelor of Letters
William Nichols Butler, Bachelor of Letters
Robert Livingston Dunlap, Bachelor of Science
(Mrs.) Augusta Batchelder Eaton, Bachelor of Letters
Charles William Foster, Bachelor of Science
Frederick Francis, Bachelor of Science
Judson Freeman Going, Bachelor of Letters
Charles Wesley Groves, Bachelor of Letters
(Mrs.) Sophronia R. Cole Hall, Bachelor of Letters
(Mrs.) Nettie Elder Harris, Bachelor of Letters
Cora Jane Hill, Bachelor of Letters
Joseph Darwin Huey, Bachelor of Science
Nellie Wainwright Jillson, Bachelor of Letters
Edward Spencer Johnson, Bachelor of Science
William Pitt Johnson, Bachelor of Science
Isabel Eliza Jones, Bachelor of Letters
Edith Louise Kirkpatrick, Bachelor of Letters
Edward Francis Ligare, Bachelor of Science
Mary Clutha McLellan, Bachelor of Letters
Walter Isham Manny, Bachelor of Letters
William Douglas Moore, Bachelor of Science
Louisa Merboth Morgan, Bachelor of Letters
John Hale Morse, Bachelor of Letters
Arthur Tappan North, Bachelor of Science
Foster North, Bachelor of Science
(Mrs.) Lucy A Hall Parr, Bachelor of Letters
Mary S Larned Parsons, Bachelor of Letters
U J Lincoln Peoples, Bachelor of Science
Elon Albert Pierce, Bachelor of Science
(Mrs.) Jennie C Mahan Plank, Bachelor of Letters
Hamlin Whitmore Sawyer, Bachelor of Letters
Joseph Schwartz, Bachelor of Science
Hosea B Sparks, Bachelor of Letters
Arthur Swannell, Bachelor of Letters
Charlotte Switzer, Bachelor of Letters
(Mrs.) Bessie Gay Plank Thompson, Bachelor of Letters
Luther Thompson, Bachelor of Science
John George Wadsworth, Bachelor of Letters
(Mrs) Angelina Gayman Weston, Bachelor of Letters
(Mrs) Etta Loraine Beach Wright, Bachelor of Letters
John Edwards Wright, Bachelor of Letters
(Mrs) Laura Mae Beach Wright, Bachelor of Letters

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THE COLLEGE OF MEDICINE

The Degree of Doctor of Medicine and Surgery

Conferred June 11, 1914, in Chicago

Frank Ashmore, Bachelor of Science
John Paul Ashworth
Herman Joseph Adelman
Harry Toler Baxter
Arthur Clarence Boehmer
Harry Elbert Bowers
Max William Brachvogel
Deand Rockhold Brengle
Carl Kice Brown
Ralph Emerson Brown
Arthur Lynn Bryan
Frederick George Carls
William Ernest Carnahan
James Gilbert Carney
Lee Stanley Cassell
Harrison Gerald Champlin
Joshua Oscar Cohen
Frank LaMont Cole
Charles Calvin Conley
Thomas Edward Conley
Florence Virginia Cooprider
George William Cusick
Arthur Lewis Davis
Martin Ralph DeHaan
William Elijah Moore Devers
Emery Holmes Du Four
Lawrence Dale Dusch
Roscoe Conklin Eaton
William Henry Evans
Ellis Benjamin Freilich
Nicholas Israel Fox
Roy Edward Fox
Meta Elise Franke
Michael Archangel Galgano
Edward John Gotthelf, Jr.
Roy Griffy
Stanley Knox Halbert
LeRoy Harold Harner
Reuben Joseph Harrington
Urban Bunyon Harris
Ralph Chapel Hartman
George Nye Hiskey
Harvey Peter Hoffmann
Rose Sophia Houda
William Samuel Howard
Bartholomew Edward Hussey
Kano Ikeda
Anna Elizabeth Isham
Johnston Charles Jackman
Carl Arthur Johnson
Kenneth Lawrence Johnston
Wilhelmina Jacoba Jongewaard
Richard Henry Juers, Ph.G.
Victor Vincent Kellner
Henry William Kleinschmit
John Mark Lacey
Arthur John Langan
James Joseph Leach
Arlington Fay Jacob Lecklider
Louis Joseph Agapit Legris
Oscar Sidney Lenit
Harry Lewinsky
Fred Oscar Lien
Leland Stanford Light
Charles Elder Lindsay
William Louis Maccani
Howard Stewart Maupin
Anthony Arthur Meyer
William Drummond Middleton
Wilmont Paul Miller
William Henry Miner
Max Minker
William Albert Mudge
Walter Edmund Mueller
Florence Edith McCann
Justin Joseph McDonald
Emile George Nadeau
Gerhard Alfred Natvig
Frank John Novak, Jr.
Clarence Ambrose Nyvall
William Albert O'Connor
Louis Thomas O'Brien
Harry Emerson Peters
Andrew Saeman Pfeiffer
Alexander Harold Phillips
Thaddeus Stanley Pierzynski
Albert Emerson Punche
Otto Bismark Rensch
Henry Richert
Francis Allen Richardson, A.B., B.S.
William Joseph Riley
Douglas Ford Robbins, A.B.
Russell Dean Robinson
Harry Arthur Salzman
Peter Arthur Schulberg
Leon Seidler
Walter Edward Simmonds
Neal Samuel Simons
Feliciano C Sombito
Julius Spiro
Walter Byrd Swackhamer
Elmer Merrill Thomas
Rollin David Thompson
Paul Scoville Traxler
Vezio Oliver Ungherini
John Albert Van Kirk
W Carlton Warrick
Harvey Edmund Webb
Carl George Wencke
Ferdinind Demander Whitby, B.S.
Milton Arthur Wiese
Claude Ernest Wiseman
Ernest Patrick Woodward

THE COLLEGE OF DENTISTRY

The Degree of Doctor of Dental Surgery

Conferred May 29, 1914, in Chicago

Nathan William Blum
Clarence Herman Cass
George William Cisar
William Edward Coverley
Philip Israel Doktorsky
Joseph Sabas Gorman
Roy Andrew Heimer
Leslie Denis Hinch
Sidney Trenholme Hood
Albert Samuel Jack
Charles Shy Kahn
Jacob Hyman Kaplan
Edward Frank Koetters
George Hezekiah Mitchell, R.Ph.
George Charles Moldt
John Joseph Plachota
Charles Leslie Puffer
Clarence John Sauer

William George Shay
Edward William Schlies
Corwin J Simmons
Milan Demitr Stevens
Herbert Flower Stevens
Michael Vincent Stevens
Herbert William Taylor
Teiche Tomita
Leif Norman Tommerson
Frank Joseph Twohey
Ellery Vergil Umbenhaur
Edwin Cyrus Zajicek

THE SCHOOL OF PHARMACY

The Degree of Graduate in Pharmacy

Conferred April 22, 1914, in Chicago

Albert Franklin Anderson
Edna Becker
August Christopher Bosch
J Burdette Brown
Floyde Wiley Bryant
George Ernest Canham
Lawrence Converse
Walter Arthur Endee
Oscar Fisler
Jeremiah G. Garrity
Harry Edward Haines
Philip Irving Hildebrandt
Elwood Jay Hollinshead
Harry E. Johnson
Jonathan G. Jordan
Elmer Chester Lane
Paul Israel Mendelsohn
Richard William Merschat
Abraham Myerson
Charles Clarence Orr
Irving Fitch Pearce
Elmer Edward Rueckert
Harold Schmid
Ralph Harold Thompson
Adrian Ton
Clio Vavra
Ladislaus Joseph Warzynski
Albert Joun Cook (Class of 1913)
William Alexander Lee (Class of 1913)
Alva Walter Rackaway (Class of 1913)
Charles Edward Wach (Class of 1913)
Mary Leinbaugh Smith (Class of 1909)

The Degree of Pharmaceutical Chemist

Conferred June 5, 1914, in Chicago

Paul Wright Edgett
Genarro Dominic Lavieri
Albert Schreiner, Jr.
George Stulik
George Frederick Vaupell
Edgar Philip Heidbreder (Class of 1913)

THE GRADUATE SCHOOL

Degrees of Master of Arts and Master of Science

Conferred June 17, 1914

Chester Harmon Allen, A.B
(Lowrence College) 1912
Master of Arts (Chemistry)
Demetrius Don Andronescu
(Roumanian College of Agriculture)
Master of Science (Agronomy)
Isabella Anderson, A.B., 1913
Master of Arts (Classics)
Alice Louise Austin, A.B.
(Monmouth College) 1910
Master of Arts (Classics)
Robert Earl Baker, A.B.
(University of Oklahoma) 1912
Master of Arts (Chemistry)
William Harry Bair, B.S.
(Ohio Northern University) 1908
Master of Science (Physics)
Theodore Rolly Ball, B.S.
(Drake University) 1908
Master of Science (Chemistry)
Oren Augustus Barr, B.Ed.
(Illinois State Normal University) 1913
Master of Arts (History)
Paul Levern Bayley, A.B.
(University of Arkansas) 1913
Master of Arts (Physics)
George Paul Boomsliter, B.S.
(Michigan Agricultural College) 1906
Master of Science (Civil Engineering)
St. Elmo Brady, A.B.
(Fisk University) 1908
Master of Arts (Chemistry)
Reed Oshea Brigham, B.S.
(Ohio State University) 1912
Master of Science (Botany)
Lois Adeline Brown, A.B.
(James Millikin University) 1912
Master of Arts (English)
Lillian Blayney, A.B.
(Monmouth College) 1913
Master of Arts (History)
Alexander Rudolph Brandner, B.S., 1913
Master of Arts (Architecture)
Lawrence Vreeland Burton, B.S., 1911
Master of Science (Chemistry)
Johannes Petrus du Buisson, A.B., 1913
Master of Arts (Agronomy)
Omar Caswell, A.B.
(Indiana University) 1913
Master of Arts (Education)
Lois Miriam Coultas, A.B.
(Illinois Woman's College) 1913
Master of Arts (German)
James Perry Coyle, A.B.
(Lake Forest College) 1910
Master of Arts (Physics)
Helen Isabel Cushing, A.B.
(Lake Forest College) 1913
Master of Arts (Philosophy)

Bert Stover Davisson, A.B.
(Indiana University) 1911
Master of Arts (Chemistry)

Prentice Hoover Defendall, A.B.
(De Pauw University) 1906
Master of Arts (English)

Ida Belle Dewey, A.B.
(Rockford College) 1913
Master of Arts (Mathematics)

Edgar Wallace Engle, B.S.
(Drury College) 1912
Master of Science (Chemistry)

Duane Taylor Englis, A.B.
(Eureka College) 1913
Master of Arts (Chemistry)

Ernest Carroll Faust, A.B.
(Oberlin College) 1912
Master of Arts (Zoology)

Lewis Nebinger Fisher, B.S., 1910
Master of Science (Theoretical and Applied Mechanics)

Miletus Lafayette Flaningam, B.S.
(Northwestern University) 1904
Master of Arts (Education)

Frank Leslie Fleener, A.B.
(Denison University) 1912
Master of Arts (Geology)

Lawrence Fleming Foster, A.B.
(Albion College) 1910
Master of Science (Chemistry)

John Joseph Gardner, B.S.
(Massachusetts Agricultural College) 1905
B.S. *(Boston University)* 1912
Master of Science (Horticulture)

Philip Garman, B.S.
(Kentucky State University) 1913
Master of Science (Entomology)

Elizabeth Mae Gittins, S.B.
(Drake University) 1909
Master of Science (Zoology)

Mary Jane Gourley, A.B., 1909
Master of Arts (Zoology)

Aloa Alice Haskett, A.B.
(Illinois Wesleyan University) 1913
Master of Arts (Classics)

Clarence Mark Hebbert, B.S.
(Otterbein University) 1911
Master of Science (Mathematics)

Archie Oliver Heck, B.S.
(Hedding College) 1913
Master of Science (Mathematics)

George William Heitkamp, A.B.
(University of Wisconsin) 1912
Master of Arts (Geology)

Ray Washington Hess, A.B.
(Morningside College) 1912
Master of Arts (Chemistry)

Charles Kay Hewes, B.S., 1912
Master of Science (Chemistry)

Milford Everett Hinds, B.S.
(Northwestern University) 1912
Master of Science (Chemistry)

Clyde Whittaker Hudelson, B.S., 1913
Master of Science (Animal Husbandry)

Anna Leo Hull, A.B., 1910
Master of Arts (History)

Nobtaro Inagaki
Master of Arts (Economics)

Nelle Louise Ingels, Ph.B.
(Greenville College) 1911
Master of Arts (Mathematics)

Morris Johnson Kernall, A.B.
(University of North Dakota) 1906
Master of Arts (Zoology)

Jessie June Kile, A.B.
(Rockford College) 1912
Master of Arts (History)

Viola Emma Knoche, A.B.
(Northwestern College) 1913
Master of Arts (German)

Burley Frank Lamb, A.B.
(Albion College) 1913
Master of Arts (Economics)

Ernest Michael Rudolph Lamkey, A.B., 1913
Master of Arts (Botany)

Martha Serena Larson, A.B., 1910
Master of Arts (Classics)

Warren Lincoln, B.S.A.
(Washington State College) 1913
Master of Science (Animal Husbandry)

Edward Lawrence McKenna, A.B.
(Columbia University) 1913
Master of Arts (Economics)

Matthew Lawrence, A.B.
(Shurtleff College) 1913
Master of Arts (History)

Edward Lotan Lawson, A.B., Ph.B.
(Union Christian College) 1901, 1902
Master of Arts (Education)

Ralph Harlan Linkins, A.B.
(Illinois College) 1911
Master of Arts (Zoology)

George Alfred Maney, C.E.
(University of Minnesota) 1911
Master of Science (Theoretical and Applied Mechanics)

Howard Mathews, B.S., 1913
Master of Science (Electrical Engineering)

Rudolph MacDermet, B.S., 1912
Master of Science (Electrical Engineering)

Lois Maia Miles, A.B., 1910
Master of Arts (Classics)

Jessie Fay Miller, A.B., 1913
Master of Arts (Chemistry)

Floyd William Mohlman, B.S., 1912
Master of Science (Chemistry)

Frances Milton Morehouse, A.B., 1910
Master of Arts (History)

Alice Elvira Morris, A.B., 1913
Master of Arts (Education)

Dora Myrtle Nebel
Master of Arts (Mathematics)

Charles Ivan Newlin, B.S., 1912
Master of Science (Animal Husbandry)

Gertrude Neiderman, B.S., 1908
Master of Science (Chemistry)

Karr Parker, B.S.
(Carthage College) 1913
Master of Science (Chemistry)

Newton Lyman Partridge, B.S., 1913
Master of Science (Entomology)

Daniel Frederick Pasmore, A.B.
(Albion College) 1913
Master of Arts (German)

Winifred Almina Perry, A.B., 1908
Master of Arts (English)

Samuel Hawkins Ray, B.S., 1913
Master of Arts (Animal Husbandry)

Harry Payne Reeves, A.B., 1913
Master of Arts (Romance Language)

Amanda Barbara Renich, A.B., 1911
Master of Arts (History)

Katharine Louise Renich, A.B., 1911
Master of Arts (History)

Anna Sophie Rogers, A.B., 1911
Master of Arts (Classics)

E. Randall Sayre, A.B., A.M.
(McKendree College) 1909-1910
Master of Arts (History)

Samuel Hawthorne Scherfee, A.B.
(Leland Stanford Junior University) 1909
Master of Arts (Botany)

Otto Paul Schinnerer, A.B., 1913
Master of Arts (German)

Clarence Scholl, B.S., 1913
Master of Science (Chemistry)

Earl Wooddell Sheets, B.S.
(West Virginia University) 1912
Master of Science (Animal Husbandry)

Walter Andrew Shewhart, A.B., 1913
Master of Arts (Physics)

Thekla Maria Siebens, A.B.
(James Milliken University) 1911
Master of Arts (German)

Edwin Rollin Spencer, A.B., 1911
Master of Arts (Education)
Wayne Edson Stevens, A.B.
(Knox College) 1913
Master of Arts (History)
Lionel Stevenson, B.S.
(University of Toronto) 1912
Master of Science (Animal Husbandry)
Claude Newton Stokes, A.B.
(McKendree College) 1913
Master of Arts (Mathematics)
Horace Wesley Stunkard, B.S.
(Coe College) 1912
Master of Arts (Zoology)
Ward William Sullivan, A.B., 1911
Master of Arts (History)
Emerson Grant Sutcliffe, A.B.
(Howard University) 1911
Master of Arts (English)
George Fred Sutherland, A.B., 1913
Master of Arts (Zoology)
Stetfan Fugta Tonabe, B.S.
(Knox College) 1911.
Master of Science (Physics)
Fred Wilbur Tanner, B.S.
(Wesleyan University) 1912
Master of Science (Chemistry)
Margaret Katherine Theilen, A.B., 1913
Master of Arts (History)
Howard Rice Thomas, C.E.
(University of Texas) 1912
Master of Science (Theoretical and Applied Mechanics)
Edna Amelia Thoreen, A.B.
(Lombard College) 1911
Master of Arts (German)
Mabel Elizabeth Thorne, A.B., 1913
Master of Arts (Mathematics)
Louis Arthur Tohill, A.B., 1912
Master of Arts (History)
Harry Dwight Waggoner, A.B., 1909
Master of Arts (Botany)
Earle Horace Warner, A.B.
(University of Denver) 1912
Master of Arts (Physics)
Allen Sage Wilber, A.B.
(University of Kansas) 1913
Master of Arts (Political Science)
Ernest Atkins Wildman, B.S.
(Earlham College) 1912
Master of Science (Chemistry)
John Frederick Wiley, Ph.B.
(De Pauw College) 1902
Master of Arts (Education)
William Harold Wilson, A.B.
(Albion College) 1913
Master of Arts (Mathematics)
Herman Carl Wolf, B.S., 1913
Master of Science (Electrical Engineering)
William Sidney Wolfe, B.S., 1913
Master of Science (Architectural Engineering)
Mary Eastman Woodin, B.S.
(Wellesley College) 1890
Master of Arts (Classics)
Albert Byard Wright, B.S., A.M.
(Illinois Wesleyan University) 1907, 1910
Master of Arts (Political Science)
William Wodin Yapp, B.S., 1911
Master of Science (Dairy Husbandry)
Yungyen Young, B.S., 1913
Master of Science (Agronomy)

Professional Degrees in Engineering

Conferred June 17, 1914

Henry Jackson Burt, B.S., 1896, Civil Engineer
Joseph Ferdinand Chinlund, B.S., 1910, Electrical Engineer
Charles Richard Clark, B. S., 1898, Master of Architecture
William Alonso Etherton, B.S., 1904, Master of Architecture
Ira William Fisk, B.S., M.S., 1909, 1913, Electrical Engineer
Joseph Norman Jensen, B.S., 1906, Civil Engineer
Albert James Schafmayer, B.S., 1907, Civil Engineer
Fred Drinkwater Yeaton, B.S., 1907, Civil Engineer

Degree of Doctor of Philosophy

Conferred June 17, 1914

Mikishi Abe, B.E. *(Tohoku Imperial University)* 1905 (Engineering)
Thesis: Statically Indeterminate Stresses in Rigidly Connected Structures of Reinforced Concrete.
William Ernest Carroll, B.S. *(Utah Agricultural College)* 1909; M.S., 1911 (Animal Husbandry)
Thesis: Effect of the Amount of Protein Consumed Upon Digestion and Protein Metabolism in Lambs and Upon the Composition of Their Flesh and Blood
William Walter Cort, A.B. *(Colorado College)* 1909; A.M., 1911, Ph.D. (Zoology)
Thesis: Larval Trematodes From the North American Fresh-Water soils
Stanley Prince Farwell, B.S., M.S., 1907, 1910 (Engineering)
Thesis: The Corona Produced by Continuous Potentials
Stanley Black Fracker, A.B. *(Buena Vista College)* 1910; M.S. *(Iowa State College)* 1912 (Entomology)
Thesis: The Classification of Lepidopterous Larvæ
Denton Loring Geyer, A.B., A.M. *(University of Wisconsin)* 1910, 1911 (Philosophy)
Thesis: The Pragmatic Theory of Truth as Developed by Peirce, James, and Dewey.
John Earl Gutberlet, A.B. *(Bethany College)* 1909, A.M., 1911 (Zoology)
Thesis: On the Development, Morphology and Economic Importance of Chicken Cestodes
Harry Fielding Hadley, A.B. *(James Millikin University)* 1911; A.M., 1912 (Chemistry)
Thesis: Phenol Extraction Methods as Applied to Coal and a Study of the Resulting Compounds
Edward Otto Heuse, B.S. *(Hanover College)* 1900; M.S., 1907 (Chemistry)
Thesis: The Vapor Pressures of Aqueous Solutions of Electrolytes

Felix Emil Held, A.B., A.M. *(Emporia College)* 1902, 1908 (German)
Thesis: Johann Valentin Andreae's Christianopolis, A Utopia of the Seventeenth Century

Edward August Theodore Kircher, A.B., A.M., 1911, 1912 (Mathematics)
Thesis: Group Properties of the Residue Classes of Certain Kronecker Modular Systems and Some Related Generalizations in Number Theory

Philip Augustus Lehenbauer, A.B. *(Westminster College)* 1907; A.M. *(James Millikin University)* 1909 (Botany)
Thesis: Growth in Relation to Temperature

Ingebrigt, Lillehei, A.B., A.M. *(University of Minnesota)* 1908, 1909 (Scandinavian Languages and Literature)
Thesis: A Study of the Language and the Main Ideas of Arne Garborg's Works

Louis Clark Mathewson, A.B., A.M. *(Albion College)* 1910, 1911; A.M., 1912 (Mathematics)
Thesis: Theorems on the Groups of Isomorphisms of Certain Groups

Harold Hossack McGregor, A.B. *(McMaster University)* 1910; M.S. *(University of Louisville)* 1912 (Chemistry)
Thesis: The Proteins of the Central Nervous System

Earl Bowman Millard, A.B. *(University of Colorado)* 1910; A.M. *(University of Wisconsin)* 1911 (Chemistry)
Thesis: The Hydration of Ions and the Influence of Viscosity on the Transference Number of Lithium Chloride

Hubert Leonard Olin, A.B. *(University of Iowa)* 1908; M.S., 1911 (Chemistry)
Thesis: The Coking of Coal at Low Temperatures, With Special Reference to the Properties and the Composition of the Products

George Wallace Sears, B.S. *(Drury College)* 1908; M.S., 1911 (Chemistry)
Thesis: Atomic Weight of Tantalum

Glenn Alfred Shook, A.B. *(University of Wisconsin)* 1907 (Physics)
Thesis: A Determination of the Sun's Temperature

Orrin Harold Smith, A.B. *(Knox College)* 1908; A.M., 1909 (Physics)
Thesis: Retrograde Rays From the Cold Cathode

Martin William Steinke, A.B. *(Wartburg College)* 1908; A.M. *(University of Washington)* 1910 (German)
Thesis: Edward Young's "Conjectures on Original Composition" in England and Germany

John Hamilton Whitten, A.B., A.M., 1911, 1912 (Botany)
Thesis: The Effect of Kerosene and Other Petroleum Oils on the Viability and Growth of Zea Mais

FELLOWS AND SCHOLARS IN THE GRADUATE SCHOOL

1914-15

William Albert Albrecht, Scholar in Agronomy *(Nominee of the College of Agriculture)*
Albert Babbit, Scholar in Mathematics
Gertrude Auld Bacon, Scholar in Entomology
Julia Minetta Barber, Scholar in English
Mary Lavenia Beck, Scholar in English
Jefferson Hall Belt, Research Fellow in Electrical Engineering (Engineering Experiment Station)
St. Elmo Brady, Fellow in Organic Chemistry
Henry Alfred Burd, Fellow in English
Helen Clark, Fellow in Psychology
Karl Adolf Clark, Fellow in Chemistry
Esther Margaret Colvin, Scholar in English
Delmar Gross Cooke, Scholar in English
Sylvan Jay Crooker, Scholar in Physics
Floy Fenton Cutler, Scholar in German *(Nominee of Hedding College)*
Niels Henriksen Debel, Fellow in Political Science
Edward Adelbert Doisy, Fellow in Physiological Chemistry
Jasper Owen Draffin, Research Fellow in Theoretical and Applied Mechanics (Engineering Experiment Station)
William Arthur Dunham, Scholar in Political Science
Erma Lytle Elliott, Scholar in Mathematics *(Nominee of Illinois Woman's College)*
John Asbury Elliott, Fellow in Plant Pathology
Emery C Farver, Scholar in Mathematics
Charles Stever Fazel, Scholar in Physics
Fay Lynton Fisher, Scholar in German *(Nominee of James Millikin University)*
Philip Garman, Fellow in Entomology
Walter Arthur Gatward, Fellow in Electrical Engineering (Engineering Experiment Station)
Clare Elmer Griffin, Scholar in Economics
Clyde Carney Hamilton, Scholar in Entomology
Frank Blair Hanson, Fellow in Zoology
Oscar Edward Harder, Fellow in Industrial Chemistry
Ruth Marie Hefferman, Scholar in English *(Nominee of Illinois Wesleyan University)*
Robert Walter Hendel, Jr., Scholar in Chemistry *(Nominee of Lombard College)*
Charles Elmer Holley, Fellow in Education
Joseph Whitney Howard, Fellow in Chemistry
Arlandus Leon Jerdan, Scholar in Animal Husbandry
Minna Ernestine Jewell, Scholar in Zoology
Morris Johnson Kernall, Fellow in Zoology
James Ernest Kindred, Scholar in Zoology
John Emmett Kirshman, Fellow in Economics
Burley Frank Lamb, Fellow in Economics
Thomas Ernest Layng, Fellow in Industrial Chemistry
Harry Fletcher Lewis, Fellow in Analytical Organic Chemistry
Lester Clyde Lichty, Research Fellow in Mechanical Engineering (Engineering Experiment Station)
William Penn Lukens, Research Fellow in Mechanical Engineering (Engineering Experiment Station)
Wallace Macfarlane, Fellow in Agronomy
Alice Meier, Scholar in German
Marie Breese Miller, Scholar in Household Science
Julian Montgomery, Research Fellow in Theoretical and Applied Mechanics (Engineering Experiment Station)
Edna Mosher, Fellow in Entomology
Odessa Madge Myers, Scholar in Classics
Merle Louis Nebel, Research Fellow in Mining Engineering (Engineering Experiment Station)
Anna Grace Newell, Fellow in Entomology
Ruth Eliza Okey, Scholar in Chemistry *(Nominee of Monmouth College)*
Raymond William Owens, Scholar in Electrical Engineering *(Nominee of the College of Engineering)*
Franklin Charles Palm, Scholar in History
Daniel Frederick Pasmore, Fellow in German
Leslie Arthur Pinkney, Scholar in Physics
Robert Bedford Pogue, Research Fellow in Railway Engineering (Engineering Experiment Station)
Ernest Alexander Reid, Scholar in Electrical Engineering

Frank Erwin Richart, Scholar in Civil Engineering
Robbins Russel, Scholar in Chemistry *(Nominee of Illinois College)*
George Rutledge, Fellow in Mathematics
Ethel Ernestine Sabin, Fellow in Philosophy
Clarence Scholl, Fellow in Sanitary Chemistry
Charles Timothy Senay, Fellow in Zoology
Wayne Edson Stevens, Fellow in History
Charles Leslie Stewart, Fellow in Economics
Floyd Benjamin Streeter, Fellow in History
Horace Wesley Stunkard, Fellow in Zoology
Frederick Curtis Swanson, Scholar in History
Henry Daniel TerKeurst, Scholar in Education
Raymer Wendell Tinsley, Scholar in German
Robert Edgar Turley, Research Fellow in Theoretical and Applied Mechanics (Engineering Experiment Station)
Mark Albert VanDoren, Scholar in English
Gordon Watkins, Scholar in Sociology
Minnie Elizabeth Watson, Fellow in Zoology
Morris Miller Wells, Fellow in Zoology
Leila Olive White, Scholar in History *(Nominee of Rockford College)*
Kathryn Williams, Scholar in Classics *(Nominee of Carthage College)*
Herbert August Winkelman, Scholar in Chemistry *(Nominee of North-Western College)*
Esther Grace Wiseman, Scholar in English *(Nominee of Shurtleff College)*
Philip Quincy Wright, Fellow in Political Science
Frank Archibald Wyatt, Fellow in Agronomy
Esther Young, Scholar in Botany
Everett Gilliam Young, Research Fellow in Railway Engineering (Engineering Experiment Station)
Lewis Emanuel Young, Fellow in Economics

THE FRANCIS JOHN PLYM FELLOWSHIP IN ARCHITECTURE

Charles Babcock McGrew, 1913

UNIVERSITY HONORS

1913-14

Awarded by the Faculty of the University for Scholarship

HONORS AT COMMENCEMENT
(June, 1914)

COLLEGE OF LIBERAL ARTS AND SCIENCES

The Degree of A. B. with Honors

Nuel Dinsmore Belnap, in History
Marshall Crittenden Merrills, in History
Odessa Madge Myers, in Latin
Frederick Curtis Swanson, in History
Mark Albert VanDoren, in English

Final Honors

(Courses of the former College of Science)

Helen Bell Comstock
Edward Adelbert Doisy
Carrie Belle Herdman
Charles Francis Hill
Esther Allen Kern
Frank Allen Kirkpatrick
Lewis S Linder
Ina Valeria Meredith
Anton Prasil
Helen Marie Richards
Emily Kingman Sunderland
Mildred May Van Cleve

Special Honors

Howard Clinton Arnold, in Ceramics
Edward Adelbert Doisy, in Chemistry
Hubert Morton English, in Chemistry
Frank Allen Kirkpatrick, in Ceramic Engineering
Anton Prasil, in Chemistry
Paul Cobb Rich, in Chemistry

COLLEGE OF ENGINEERING

Final Honors

Arthur Hildeman Aagard
Joseph Mandel Brandstetter
Francis Henri Bulot
Ralph Burke
John Cutler
Armin Elmendorf
Elijah Robert Hatowski
Wallace Bright Livesay
Elmer McCormick
George Meyer, Jr.
Raymond William Owens
George Edward Quick
Ernest Alexander Reid
Frank Erwin Richart
David Morris Riff
Frank Thomas Sheets
William Davis Shipman
Hubert Vincenz Stephenson
Henry Raymond Tear
Harold Earle Thompson
Clifford Harper Westcott
Carl Stanley Wyant

Special Honors

Armin Elmendorf
Elijah Robert Hatowski
Raymond William Owens
Frank Thomas Sheets
Hubert Vincenz Stephenson
Henry Raymond Tear
Clifford Harper Westcott

COLLEGE OF AGRICULTURE

Final Honors

Earl Kirkwood Augustus
George Stanley Beaumont
Frederick Jackson Blackburn
Ralph Lee Eyman
Ora French Foster
Wilfred Espin Johns
Roy Jacob Lyons
Catharine Melvina Planck
Glenn Wilson Schroeder
Izzet Basili Suryich
Henry Peirce Vandercook
James Alfred Tate

COLLEGE OF LAW

Final Honors

William Hamilton Lee — Stanley Landon Pogue

LIBRARY SCHOOL

Final Honors

Sabra Elizabeth Stevens

PRELIMINARY HONORS

(October, 1914)

College of Liberal Arts and Sciences

Walter Earl Baker
Otis Avery Barnes
Nellie Flora Bartels
Harriet Thompson Barto
Zilpha Curtis Battey
Edwin C Obert Beatty
Ella Burns
Donald Thompson Carlisle
Hilda Marion Croll
Bess East
Helen Vastine Fisher
Nellie Corey Ford
Fred Charles Hahn
Elmo Paul Hohman
Doris Jean Holloway
Sidney Dale Kirkpatrick
Kate Lackey
Leo Gay McAfee
Russell Ward Millar
Adolph Frederick Pauli
Maida Jane Phoenix
Kenneth Dwight Ross
Walter Joseph Tilton
Gertrude T Weber

College of Engineering

Lewis Michael Becker
Clarence Louis Benz
Thomas Henry Burrell
Ernest Williams Cobb
Clarence Todd Grant
Arthur Hagener
Eugene Carl Hamill
John Harold Heindel
Arnold Carl Holinger
Charles Harold Jackman
Carson Gary Jennings
Maurice Carl Johnson
Charles Gorr Klopp
Leroy William Ledgerwood
Andrew Henry Lenz
Joseph Moore McKeon
C. Sedgwick Moss
Oliver John Neslage
William Love Parish
Eric Frederick Pihlgard
George W Renwick
Albert William Robinson
Louis John Rust
James Crear Stitton
Harry Frederick Stocker
Albert Getten Stone
Ralph Raymond Thomas
Floyd Elsworth Troxel
Seigfried Nathaniel Vibelius
Arthur Charles Zimmermann

College of Agriculture

Edwin Adams Bebb
Forrest Bebb
Edward Stevenson Block
George Curtiss
Berthier Wesley Fairbanks
Louis Jacob Greengard
Hugh Grigsby
Laura Edna Hirth
Charles Leo Jez
Alexander Paul MacDonald, Jr.
Alva Elisha McCoy
John Turner Mills
Walter Louis Rohlfing
Raymond Stanley Scholl
Arthur Truman Semple
Clair Joel Thomas
Alexander Harvey Turner
John Wesley Watson
Robert Nicholas Wilford

College of Law

Elliott Billman
Fred Hanford Kelly
Frank Clifton Slater
John William Freels

School of Music

Stella Percival

PRIZES

B'nai B'rith Prize

(Freshman Prize)

Julius Cohen

Llewellyn Prizes in Architectural Engineering

Myrlin Stern Fallis
Samuel James Farlow
Eugene Franklin Adams

Phi Beta Kappa Prize

Mark Albert VanDoren

MILITARY HONORS

COMMISSIONS AS BREVET CAPTAINS, ILLINOIS NATIONAL GUARD, ISSUED BY THE GOVERNOR IN 1914

Clifford Harper Westcott
Edwin C Prouty
Herbert Edward Howes
Harold Paul Ousley
Paul Cobb Rich
Charles R Velzy
Edwards Hall Berry
Frederick John Giehler
Earl Kirkwood Augustus
Floyd Bergland
E L Hasker
E A Doisy
Harry O Danz
Walter John Bublitz
Harry E Codlin
Pierce Vandercook
Harrie S Mueller
Harry Gardner Wood
Warren Edward Bow
George Meyer, Jr.
Edmund R Foster
Leslie W Faulkner
C Paul Fletcher
Harry C Webster
David M Riff
Walter Joseph Blum
Charles Henry Thompson
Julius C Palmer
Arthur H Aagard
Arthur W Baumgarten
William D Shipman
Philip Buck
Ora French Foster

REPORTED TO THE ADJUTANT GENERAL, UNITED STATES ARMY, AS DISTINGUISHED CADETS

Earl Kirkwood Augustus
Walter John Bublitz
Harry O Danz
Warren Edward Bow
Leslie W Faulkner
Edmund R Foster
E L Hasker
Herbert Edward Howes
George Meyer, Jr.
Harrie S Mueller
Harold Paul Ousley
Edwin C Prouty
Paul Cobb Rich
David M Riff
Charles R Velzy
Harry C Webster
Clifford Harper Westcott
Harry Gardner Wood

ROSTER OF OFFICERS AND NON-COMMISSIONED OFFICERS OF THE UNIVERSITY CORPS OF CADETS, 1914-15
FIRST REGIMENT

Colonel.....J. N. Greene
Captain and Adjutant.....J. C. Hostetler
Captain and Quartermaster.....R. L. Herman
Captain and Commissary.....G. D. Stopp
Regimental Sergeant Major.....F. R. Babcock
Regimental Quartermaster Sergeant.....J. C. Knoche
Regimental Commissary Sergeant.....A. M. Adams
Regimental Color Sergeant.....M. R. Finley

First Battalion

Major.....E. C. Elles
First Lieutenant and Adjutant.....E. A. Smith
Second Lieutenant and Quartermaster.....B. P. Reinsch
Sergeant Major.....J. H. Needler

	Company A		*Company B*
Captain,	L. H. Dunham	Captain,	B. H. Decker
1st Lieutenant,	J. A. Chase	1st Lieutenant,	E. Shelby
2nd Lieutenant,	W. P. Beaubien	2nd Lieutenant,	K. Bell
1st Sergeant,	L. H. Gift	1st Sergeant,	W. O. Nelson
Q. M. Sergeant,	C. W. Borton	Q. M. Sergeant,	G. F. Cadisch

	Company A		*Company B*
Sergeants,	Leon Adler	Sergeants,	D. A. Albrecht
	C. L. Albee		R. M. Fisher
	R. Fischer		F. M. Judson
	A. F. Meyer		R. Meyer
	E. C. Runneberg		P. Van Winkle
	L. W. Woltman		M. G. Silver
	J. N. Johnson		P. L. Schroeder
	F. R. Cattell		G. M. Gehant
Corporals,	L. N. Bailey	Corporals,	C. A. Britt
	H. A. Branan		A. L. Hegener
	R. G. Heeschen		L. M. Turner
	R. L. Swindler		R. T. Elliott
	E. E. Eleson		L. C. Maxwell
	H. W. McCoy		J. K. Stringer
	E. H. Stevenson		

	Company C		*Company D*
Captain,	E. R. P. Rall	Captain,	W. K. Norris
1st Lieutenant,	L. E. Lamkins	1st Lieutenant,	Geo. Curtiss
2nd Lieutenant,	B. W. Fairbanks	2nd Lieutenant,	W. W. Sheldon
1st Sergeant,	W. H. BonDurant	1st Sergeant,	H. R. Jobst
Q. M. Sergeant,	E. B. Ayres	Q. M. Sergeant,	C. R. Coultas
Sergeants,	LeRoy Bradley	Sergeants,	R. A. Burton
	D. Babcock		T. Balderson
	L. W. Chaleraft		R. M. Chittenden
	H. J. Fiteh		H. B. Fites
	J. C. Mickelson		D. H. Kennett
	C. O. Schultz		H. W. Moor
Corporals,	A. L. Carlson		J. H. Sedgwick
	C. M. Clark	Corporals,	J. H. Cryder
	H. E. Mueller		H. A. Pearson
	W. E. Everham		H. H. Wiley
	L. O. Mitchell		F. H. Thatcher

Second Battalion

Major.....W. C. Armstrong
First Lieutenant and Adjutant.....R. E. Denz
Second Lieutenant and Quartermaster.....R. L. Schiesswohl
Sergeant Major.....J. H. Powers

	Company E		*Company F*
Captain,	R. R. Zipprodt	Captain,	I. R. Cline
1st Lieutenant,	D. E. Miller	1st Lieutenant,	W. H. Hough
2nd Lieutenant,	W. L. Rohlfing	2nd Lieutenant,	E. C. Swartwout
1st Sergeant,	J. W. Hilbert	1st Sergeant	H. R. Ferguson
Q. M. Sergeant,	I. Countryman	Q. M. Sergeant,	C. D. Dick
Sergeants,	E. T. Colton	Sergeants,	L. A. Bauder
	H. L. Clayton		D. C. Corzine
	S. S. Fitzgerrell		J. H. Fleming
	A. W. Landstrom		C. H.Sheppard
	C. O. Mueller		F. W. Leggitt
	A. H. Seeglitz		J. L. Munson
	D. A. Fay		R. H. Engle
Corporals,	H. L. Carlson	Corporals,	H. C. Grunewald
	G. H. Hoffman		H. H. Porter
	L. B. Perkins		G. C. Wilson
	C. A. Williams		R. E. Gray
	W. A. Moore		J. F. Taggart
	J. H. Ticknor		C. M. Ettinger
			B. Conklin

	Company G		*Company H*
Captain,	A. H. Huisken	Captain,	C. A. Nebel
1st Lieutenant,	R. V. Waller	1st Lieutenant,	F. M. VanNatter
2nd Lieutenant,	L. R. Lumley	2nd Lieutenant,	C. N. Owen
1st Sergeant,	H. W. MacKechnie	1st Sergeant,	E. C. Dewey
Q. M. Sergeant,	D. H. Hamilton	Q. M. Sergeant,	H. H. Hensold
Sergeants,	L. V. Cope	Sergeants,	C. B. Dippell
	P. Becker		W. A. Behel
	E. P. Frohardt		C. W. Smith
	J. T. Lewis		F. H. Geiler
	H. Greenhill		B. V. Lichter
Corporals,	I. Morrison		C. Gross
	J. H. Dale	Corporals,	C. F. Naden
	W. R. Horney		G. R. Davis
	G. E. Potter		C. G. Howard
	R. J. Woods		J. H. Ramser
	C. J. Grubl		D. A. Hamilton
	C. L. Pfeiffer		R. E. Polk
			A. C. Woods

Third Battalion

Major ..... E. H. Pool
First Lieutenant and Adjutant ..... R. S. Mason
Second Lieutenant and Quartermaster ..... O. J. Troster
Sergeant Major ..... P. Calhoun

Company I

Captain,	A. M. Baker
1st Lieutenant,	E. F. Pihlgard
2nd Lieutenant,	O. C. K. Hutchinson
1st Sergeant,	C. R. Gross
Q. M. Sergeant,	A. R. Keagy
Sergeants,	I. L. Lummis
	H. V. Newlin
	R. M. Overton
	A. R. Gould
	J. R. Lindsey
Corporals,	F. E. Evans
	W. M. Richmond
	F. E. Williams
	W. T. Purcell
	R. C. Woods
	H. R. Richardson

Company K

Captain,	M. E. Slater
1st Lieutenant,	R. D. Barnes
2nd Lieutenant,	K. S. Stice
1st Sergeant,	H. B. Dutton
Q. M. Sergeant,	R. H. Lawrence
Sergeants,	B. Foster
	B. C. Berg
	G. C. Darrell
	C. R. Gideon
	C. C. Lundeen
	D. R. Norris
	G. C. Smith
Corporals,	H. G. Overend
	S. W. Excell
	G. L. Ritchie
	M. A. Hein
	R. S. Raaberg
	H. J. Barnes

Company L

Captain,	L. E. Thorne
1st Lieutenant,	M. C. Johnson
2nd Lieutenant,	A. G. Steinmayer
1st Sergeant,	M. M. Lovell
Q. M. Sergeant,	R. M. Leuder
Sergeants,	W. S. Frazier
	L. H. Davis
	J. F. McCloud
	P. W. Ott
	V. H. Dupre
	C. K. Gabriel
Corporals,	M. C. Faulk
	J. G. Ritter
	W. A. Brittin
	L. A. Hoffman
	R. E. Rathsack

Company M

Captain,	J. H. Miller
1st Lieutenant,	A. M. Kircher
2nd Lieutenant,	L. E. Mulac
1st Sergeant,	S. McNulta
Q. M. Sergeant,	R. B. McFarland
Sergeants,	E. H. Gay
	C. M. Hall
	W. T. McElveen
	G. J. Page
	R. D. Sundell
Corporals,	R. P. Rahn
	A. H. Kaufman
	M. I. Robinson
	L. L. Hunt
	E. M. Reschets
	C. R. Frederick

SECOND REGIMENT

Lieutenant Colonel ..... A. H. Grunewald
Captain and Adjutant ..... G. H. Butler
Captain and Quartermaster ..... E. A. James
Captain and Commissary ..... A. M. Barreau
Regimental Sergeant Major ..... V. H. Grossberg
Regimental Quartermaster Sergeant ..... M. Heath
Regimental Commissary Sergeant ..... H. L. Husson
Regimental Color Sergeant ..... W. L. Crawford

First Battalion

Major ..... C. F. Hood
First Lieutenant Adjutant ..... R. Steinmayer
Second Lieutenant and Quartermaster ..... H. T. Rogers
Sergeant Major ..... D. D. Sharer

Company A

Captain,	C. L. Ritts
1st Lieutenant,	C. W. McCumber
2nd Lieutenant,	G. S. Schaller
1st Sergeant,	E. S. Axline
Q. M. Sergeant,	J. O'Neil
Sergeants,	H. C. Geselbracht
	H. J. Bluhm
	M. R. Davis
	T. T. McEvoy
	C. S. Palmer
	J. W. Teasdale
	W. W. Polk
Corporals,	W. C. Savage
	J. L. Brown
	F. W. Jones
	R. Rahn

Company B

Captain,	D. C. Scheele
1st Lieutenant,	D. W. Crane
2nd Lieutenant,	C. W. Lenzing
1st Sergeant,	H. O. Siegmund
Q. M. Sergeant,	C. H. Ruedi
Sergeants,	A. A. Gilbert
	E. F. Bolinger
	H. S. McGuinness
	F. W. Patton
	R. H. Thompson
	D. F. Heath
Corporals.	H. H. Rathburn
	A. T. Fishman
	A. R. Kinsey
	W. M. Keach
	E. G. Roos
	M. Schecht
	E. W. Brunskill

	Company C		*Company D*
Captain,	G. D. Griswold	Captain,	C. W. Lincoln
1st Lieutenant,	E. C. O. Beatty	1st Lieutenant	E. W. Noxon
2nd Lieutenant,	J. G. Eppinger	2nd Lieutenant,	C. J. North
1st Sergeant,	D. T. Swain	1st Sergeant,	M. B. Ware
Q. M. Sergeant,	J. O. Schmitz	Q. M. Sergeant,	L. F. Simpson
Sergeants,	R. E. Dippel	Sergeants,	C. E. Johnson
	L. C. Heckler		W. E. Brotherton
	R. Perry		L. F. Draper
	H. P. Thurlow		S. R. Heindel
	H. B. Bramlet		W. H. Mandeville
	R. L. McKown		S. Trelease
Corporals,	J. W. Washburn		N. Gerten
	D. C. Goudy	Corporals,	J. H. Armstrong
	H. A. Kirby		R. E. Lawrence
	R. J. Craigmile		H. Schroeppel
	A. R. Kemp		S. R. Cunningham
	C. B. Rowe		N. A. Knudson
	S. C. Hopkins		J. A. Schulz

Second Battalion

Major.....L. D. Knapp
First Lieutenant and Adjutant.....R. R. Thomas
Second Lieutenant and Quartermaster.....L. W. Reese
Sergeant Major.....F. A. Logan

	Company E		*Company F*
Captain,	E. R. Dillavou	Captain,	S. S. Davis
1st Lieutenant,	A. G. Stone	1st Lieutenant,	J. H. Gage
2nd Lieutenant,	L. S. Morrill	2nd Lieutenant,	P. D. Amsbary
1st Sergeant,	E. P. Daley	1st Sergeant,	T. S. Hamilton
Q. M. Sergeant,	G. L. Smith	Q. M. Sergeant,	W. Stanley
Sergeants,	T. O. Moffet	Sergeants,	J. W. Nelson
	R. P. Brown		A. H. Burger
	D. M. Elliott		K. Epstein
	A. A. Hoffman		O. W. Holmes
	H. M. Martin		W. A. Mather
	E. D. Van Frank		C. W. Reuling
	M. L. Reed	Corporals,	J. K. Barber
Corporals,	V. E. Ascherman		C. A. Gustafson
	L. R. Gray		G. L. Lindeberg
	L. R. Lehman		E. F. Shelley
	R. A. Scott		D. E. Mayrard
	F. W. Shaw		E. T. Davis

	Company G		*Company H*
Captain,	R. Niver	Captain,	H. E. Barden
1st Lieutenant,	J. E. Fetherston	1st Lieutenant,	R. W. Miller
2nd Lieutenant	H. P. Grieson	2nd Lieutenant,	R. F. Harvey
1st Sergeant,	C. Citizen	1st Sergeant.	J. E. Ott
Q. M. Sergeant,	C. B. Taylor	Q. M. Sergeant,	S. P. Howe
Sergeants,	E. L. Stouffer	Sergeants,	C. E. Turner
	F. E. Butterfield		W. F. Campbell
	W. B. Ewer		H. W. Felton
	M. C. Hughes		E. T. Janssen
	L. B. Maxwell		H. M. Maze
	L. Whitney	Corporals,	M. S. Hancock
Corporals,	P. E. Bower		D. R. Martin
	T. McGowan		C. E. Swenson
	H. Soderburg		K. L. Helper
	H. L. Derby		S. J. Lurie
	A. N. Lundgren		
	J. A. Ranney		

	Signal Company		*Battery*
Captain,	L. C. Bow	Captain,	M. E. Hoit
1st Lieutenant,	R. W. Kritzer	1st Lieutenant,	S. N. Vibelius
1st Lieutenant.	B. I. Rutledge	2nd Lieutenant,	G. W. Haan
1st Lieutenant,	H. A. Smith	1st Sergeant.	V. H. Kern
1st Sergeant,	C. E. Trout	Sergeants,	L. T. McCabe
Sergeants,	J. W. Smith		M. D. Roberts
	A. Tower		T. A. Haish
	F. A. Brooks		L. L. Davis
	M. A. Gould		L. G. Ayres
Corporals,	H. L. Ford		
	J. H. Kasbeer		
	J. P. Smallwood		
	W. T. Brady		
	D. L. Foster		
	R. S. Pfeiffer		

ANNUAL COMPETITIVE DRILLS—1914

Winner University Gold Medal.....Sergeant Major E. Shelby
Winner Hazelton Gold Medal.....Lance Corporal L. H. Gift

Infantry

University Bronze Medals

(Sophomore Competitive Drill)

Company C, 1st Battalion, University Regiment

Captain,	E. L. Hasker	Privates.	F. J. A. Hoehn
1st Lieutenant,	J. C. Hostetler		C. R. Howe
2nd Lieutenant,	E. J. Bartz		H. L. Humpidge
1st Sergeant,	W. H. Hough		E. G. Johnson
Sergeants,	L. E. Lamkins		H. J. Johnson
	C. W. Lenzing		G. C. Klippel
	W. L. Parish		E. Koepke
	R. S. Schell		P. G. Kuhnen
	W. P. Beaubien		G. Lanan
Corporals,	T. S. Simmons		A. H. Lenz
	C. R. Haskett		F. W. Martin
	A. R. Keller		G. E. Melin
	J. H. McCormack		R. L. Moses
	R. W. Ruth		H. L. Mueller
	H. W. Lindsay		R. H. Nixon
Privates,	J. G. Allen		J. J. Patterson
	V. W. Bchel		P. T. Primm
	L. B. Boyd		D. W. Probst
	P. BreCount		F. W. Ramey
	O. M. Burns		G. L. Rigg
	C. E. Cooper		W. O. Roessler
	B. N. Culmer		G. S. Rogers
	H. R. Davis		G. F. Sallee
	F. L. Dougherty		E. Schaeffer
	H. J. Donaldson		R. F. Shaffer
	D. Downey		G. W. Smith
	F. E. Dunlap		G. E. Sterling
	O. M. Fuller		H. F. Sutton
	K. Geisendorfer		J. A. Tate
	P. H. Graves		W. W. Trantow
	W. W. Gunkel		W. G. Tuell
	S. Hansen		J. W. Watson
	G. H. Hartman		R. N. Wilford
	J. H. Hedgcock		M. Wolter
	W. W. Hixon		G. A. Wrisley

**University Bronze Medals and Pins*

(Freshman Competitive Drills)

Company C, 2nd Battalion, University Regiment

Captain,	W. J. Bublitz	Privates,	C. A. Britt
1st Lieutenant,	L. H. Dunham		M. E. Canady
2nd Lieutenant,	A. H. Huisken		B. J. Carius
1st Sergeant,	E. C. O. Beatty		F. C. Cargill
Sergeants,	E. W. Noxon		J. Cartmill
	C. N. Owen		R. W. Cochran
	L. J. Rust		R. E. Copper
	L. W. Reese		C. Crofts
	Bayard Brown		G. Cullinane
Corporals,	W. E. Baker		H. Darby
	H. C. Coleman		L. Day
	L. E. Herget		C. D. Dick
	C. A. Klein		P. A. Dudley
	O. C. Markwell		D. M. Elliott
L. Corporals,	W. H. BonDurant		W. B. Ewer
	J. H. Needler		H. R. Ferguson
Privates,	D. A. Albrecht		H. B. Fites
	A. Arends		W. S. Frazier
	H. S. Arnold		G. M. Gehant
	C. Boeock		
	E. Bohrn		

*Sophomores, bronze medals. Freshmen, bronze pins.

G. T. Gore
D. Grover
T. Hamilton
S. D. Harwood
K. L. Helper
J. Hirstein
C. H. Hudelson
M. C. Hughes
J. N. Johnson
I. Jorstad
F. E. Kier
A. R. Kinsey
N. A. Knudson
M. Leach
S. T. Lurie
W. McCaughey
W. McElveen
F. B. Macomber
D. Magruder
H. E. Mueller
J. Newar
W. Nordenholt
P. W. Ott
C. Palmer
H. Pendarvis
H. Porter
R. Raaberg
H. Rathburn
E. Richolson
L. Roedel
H. Shank
C. Shearer
E. F. Shelley
L. Smith
R. Sundell
D. Swain
G. W. Teasdale
F. Walker
L. B. Walsh
H. Wiley
E. Winter

Artillery

University Bronze Medals

Captain,	E. R. Foster	Privates,	H. C. Clendennin
1st Lieutenant,	M. E. Hoit		L. L. Davis
2nd Lieutenant,	R. Niver		R. S. Fraser
1st Sergeant,	S. N. Vibelius		R. C. Eaton
Privates,	L. G. Ayres		D. McGregor
	J. F. Wright		

Signal Company

University Bronze Medals

Captain,	L. W. Faulkner	Privates,	J. G. Fitch
1st Lieutenant,	L. C. Bow		L. R. Caldwell
2nd Lieutenant,	R. W. Parker		M. A. Gould
Sergeant,	F. H. Williams		V. E. Spencer
Corporal,	J. R. Tanner		H. B. Ingalls
Privates,	J. W. Smith		H. A. Smith
	E. C. Horton		B. H. Clark
	R. A. Burtnett		B. I. Rutledge

Rifle Competition

University Bronze Medals

Company C, 3rd Battalion Team

1st Sergeant,	D. E. Miller	Privates,	L. M. Bailey
Sergeant,	J. H. Gage		A. D. Little
	H. F. Wanderer		

Battalion Competitive

Third Battalion—Major P. C. Rich, Commanding

SUMMARY OF OFFICERS

BY COLLEGES AND SCHOOLS

1914-15

OFFICERS OF INSTRUCTION

Colleges and Schools	Professors		Associate Professors		Assistant Professors		Associates	
	Men	*Wom.*	*Men*	*Wom.*	*Men*	*Wom.*	*Men*	*Wom.*
Liberal Arts and Sciences	46	..	10	..	26	..	16	1
Engineering	17	..	1	..	18	..	14	..
Agriculture	15	1	..	..	12	1	21	3
Music	1	..	..	..	1	1	..	..
Law	6	..	..	..	1	..	..	..
Library	1	..	..	..	..	1	..	1
Military Science	1	..	..	..	..	..	..	..
Physical Training	1	1	..	..	..	..	..	..
Totals at Urbana	88	2	11	..	58	3	51	5
Medicine	29	..	8	1	19	3	1	..
Dentistry	8	..	..	..	4	..	..	..
Pharmacy	1	..	..	..	1	..	..	..
Totals in Chicago	38	..	8	1	24	3	1	..
TOTALS IN UNIVERSITY	126	2	19	1	82	6	52	5

OFFICERS OF ADMINISTRATION

General .....

Library Staff .....

TOTAL, INSTRUCTIONAL AND ADMINISTRATIVE .....

Deduct Duplicates .....

NET TOTAL IN UNIVERSITY .....

SUMMARY OF OFFICERS

BY COLLEGES AND SCHOOLS

1914-15

Special Lecturers		Instructors		Assistants		Graduate Assistants		Student Assistants		Totals		
Men	*Wom.*	*Men*	*Wom.*	*Men*	*Wom.*	*Men*	*Wom.*	*Men*	*Wom.*	*Men*	*Wom.*	*Total*
1	..	47	8	69	9	28	2	13	..	256	20	276
1	..	38	..	16	..	..	..	..	..	105	..	105
1	..	14	8	29	..	..	..	..	..	92	13	105
..	..	5	3	..	..	..	..	..	..	7	4	11
..	..	..	..	..	..	..	..	..	..	7	..	7
..	1	1	1	..	1	..	..	..	..	2	5	7
..	..	..	..	..	..	..	..	10	..	11	..	11
..	..	3	2	1	3	..	..	..	1	5	7	12
3	1	108	22	115	13	28	2	23	1	485	49	534
3	..	70	4	19	2	..	..	8	..	157	10	167
2	..	10	..	2	..	..	..	5	..	31	..	31
1	..	4	..	..	..	..	..	..	..	7	..	7
6	..	84	4	21	2	..	..	13	..	195	10	205
9	1	192	26	136	15	28	2	36	1	680	59	739

.....	49	3	52
.....	6	38	44
.....	735	100	835
.....	45	13	58
.....	690	87	777

SUMMARY OF STUDENTS

1914-1915

College and Course	Seniors Men	Wom.	Total	Juniors Men	Wom.	Total	Sophomores Men	Wom.	Total
LIBERAL ARTS AND SCIENCES									
General	58	92	150	76	80	156	65	71	136
Business	34	3	37	70	...	70	87	5	92
Medical Preparatory	3	...	3	13	...	13	27	1	28
Household Science	..	36	36	...	43	43	...	41	41
Chemistry	6	...	6	13	1	14	5	1	6
Chemical Engineering	18	...	18	14	...	14	29	...	29
Ceramics	7	...	7	12	...	12	13	...	13
Ceramic Engineering	7	...	7	5	...	5	4	...	4
Totals	133	131	264	203	124	327	230	119	349
ENGINEERING									
Architecture	26	...	26	29	...	29	39	1	40
Architectural Eng.	17	...	17	35	...	35	52	...	52
Civil Engineering	30	...	30	35	...	35	44	...	44
Electrical Engineering	24	...	24	59	...	59	60	...	60
Mechanical Engineering	29	...	29	55	...	55	67	...	67
Mining Engineering	3	...	3	3	...	3	8	...	8
Mun. & San. Eng.	8	...	8	8	...	8	9	...	9
Railway Civil Eng.	..	...	...	4	...	4	3	...	3
Railway Electr. Eng.	1	...	1	...	...	...	7	...	7
Railway Mech. Eng.	..	...	...	1	...	1	4	...	4
Totals	138	...	138	229	...	229	293	1	294
AGRICULTURE									
General	120	3	123	160	4	164	206	1	207
Household Science	..	10	10	...	18	18	...	42	42
Totals	120	13	133	160	22	182	206	43	249
MUSIC	2	7	9	...	9	9	1	9	10
TOTALS UNDERGRADUATES AT URBANA	393	151	544	592	155	747	730	172	902
				Third Year			*Second Year*		
LAW				16	...	16	27	...	27
LIBRARY SCHOOL							...	18	18
TOTALS, UNDERGRADUATE AND PROFESSIONAL SCHOOLS AT URBANA									
GRADUATE SCHOOL									
TOTALS AT URBANA									
SUMMER SESSION (1914)									
TOTAL REGISTRATION									
Deduct Students Returned									
Net Total, Summer Session									
TOTALS AT URBANA, TO FEBRUARY 20, 1915									
	Seniors			*Juniors*			*Sophomores*		
MEDICINE (Chicago)	93	8	101	105	6	111	55	6	61
				Seniors			*Juniors*		
DENTISTRY (Chicago)				21	...	21	37	1	38
PHARMACY (Chicago)							*Second Year*		
Ph.G. Course							70	2	72
Ph.C. Course							4	1	5
Total Pharmacy							74	3	77
TOTAL IN CHICAGO									
TOTAL IN UNIVERSITY TO FEBRUARY 20, 1915									
Deduct Duplicates									
NET TOTAL									

SUMMARY OF STUDENTS

1914-1915

Freshmen			Specials			Totals		
Men	*Wom.*	*Total*	*Men*	*Wom.*	*Total*	*Men*	*Wom.*	*Total*
237	184	421	12	10	22	448	437	885
206	8	214	7	...	7	404	16	420
67	1	68	...	...	...	110	2	112
...	94	94	...	1	1	...	215	215
26	...	26	...	...	...	50	2	52
36	...	36	...	...	...	97	...	97
11	...	11	...	...	...	43	...	43
14	...	14	...	...	...	30	...	30
597	287	884	19	11	30	1,182	672	1,854
80	1	81	3	...	3	177	2	179
75	...	75	...	...	...	179	...	179
94	...	94	3	...	3	206	...	206
125	...	125	1	...	1	269	...	269
117	...	117	3	...	3	271	...	271
25	...	25	...	...	...	39	...	39
11	...	11	...	...	...	36	...	36
6	...	6	...	...	...	13	...	13
6	...	6	1	...	1	15	...	15
1	...	1	...	...	...	6	...	6
540	1	541	11	...	11	1,211	2	1,213
446	9	455	78	11	89	1,010	28	1,038
...	59	59	...	4	4	...	133	133
446	68	514	78	15	93	1,010	161	1,171
1	37	38	4	19	23	8	81	89
1,581	391	1,972	112	45	157	3,411	916	4,327
	First Year							
55	...	55	10	...	10	108	...	108
3	24	27	...	4	4	3	46	49
.....						3,522	962	4,484
.....						369	75	444
.....						3,891	1,037	4,928
.....						589	349	938
.....						322	98	420
.....						267	251	518
.....						4,158	1,288	5,446
	Freshmen			*Specials*				
10	2	12	1	1	2	264	23	287
	Freshmen			*Specials*				
23	...	23	2	...	2	83	1	84
	First Year			*Specials*				
69	5	74	46	...	46	185	7	192
2	...	2	...	...	...	6	1	7
71	5	76	46	...	46	191	8	199
.....						538	32	570
.....						4,696	1,320	6,016
.....						10	2	12
.....						4,686	1,318	6,004

SUMMARY OF DEGREES

Degrees in the Graduate School		
A.M.	72	
M.S.	40	
C.E.	4	
E.E.	2	
M.Arch.	2	
Ph.D.	22	
Total		142
Baccalaureate Degrees		
A.B., College of Liberal Arts and Sciences	247	
B.L., College of Liberal Arts and Sciences*	27	
B.S., College of Liberal Arts and Sciences	21	
B.S., College of Liberal Arts and Sciences*	5	
B.S., College of Engineering	218	
B.S., College of Engineering*	10	
B.S., College of Agriculture	143	
B.S., College of Agriculture*	3	
B.Mus., School of Music	5	
Total		679
Degrees in Law		
LL.B.	22	
J.D.	3	
Total		25
Degrees in Library Science		
B.L.S.		5
TOTAL, COLLEGES AND SCHOOLS IN URBANA		851
Degrees in Medicine		
M.D.	113	
Degrees in Dentistry		
D.D.S.	30	
Degrees in Pharmacy		
Ph.G.	32	
Ph.C.	6	
Total		38
TOTAL, DEPARTMENTS IN CHICAGO		181
TOTAL, ALL DEPARTMENTS		1032

*Degrees conferred on former students; see page 530.

INTERCOLLEGIATE DEBATERS

1913-14

In the Central Debating Circuit

Against Iowa

Leal Wiley Reese
Harry Thomas Wood
Herbert Clarence Helm

Against Wisconsin

Isaac Ray Carter
Ralph Ebner Himstedt
Frank Clifton Slater

In the State University League

Against Ohio State

Donald Ashway Grossman
George Washington Bristow
Burley Frank Lamb

Against Indiana

Perley Melvin Watson
Vernon Thompson Stevens
Benjamin Wham

Representative in the Northern Oratorical League

Albert Vernon Essington

DIRECTORY OF ALUMNI ASSOCIATIONS

GENERAL ALUMNI ASSOCIATION

President: A. N. Talbot, '81, 1011 W. California avenue, Urbana, Ill.
Secretary-Treasurer: Franklin W. Scott, '01, 1103 W. Oregon street, Urbana, Ill.

DEPARTMENTAL ALUMNI ASSOCIATIONS

The Alumni Association of the Library School
President: Lillian B. Arnold, '02, Public Library, Dubuque, Iowa
Secretary-Treasurer: Jennie A. Craig, '06, 613 W. Springfield avenue, Champaign, Ill.
The Alumni Association of the College of Medicine
President: Dr. J. M. Berger, 4005 W. Madison street, Chicago
Secretary: Dr. Frank Chauvet, 726 S. Crawford avenue, Chicago
The Alumni Association of the College of Dentistry
President: Dr. C. M. Loescher, '04
Secretary: Dr. A. G. Nauman, 813 W. Harrison street, Chicago
The Alumni Association of the School of Pharmacy
President: George P. Mills, '84, Evanston, Ill.
Secretary-Treasurer: A. H. Clark, 74 E. Twelfth street, Chicago

LOCAL ALUMNI ASSOCIATIONS

California
San Francisco: The Golden Gate Alumni Association of the University of Illinois
President: J. W. Forsyth, '81, Gilroy
Secretary-Treasurer: Ella Barber, '84, Kenwood
Southern California: The University of Illinois Alumni Association of Southern California
President: Frank L. Drew, '04, 1154 N. Mentor avenue, Pasadena
Secretary: Ernest Ingold, '09, 335 S. Hill street, Los Angeles

Colorado
University of Illinois Club of Colorado
President: Frank L. Birney, '81, 309 Ideal block, Denver
Secretary-Treasurer: Dr. T. J. Fenton, '06

District of Columbia
Washington: University of Illinois Club of Washington
President: Wm. L. Chitty, '86, Interior Dept., Washington, D. C.
Secretary: W. O. Gordon, '11, Bureau of Animal Husbandry, Dept. of Agriculture, Washington, D. C.

Idaho
The Illini Club of Idaho
President: C. F. Pike
Secretary: F. N. Ropp, '08, Federal bldg., Boise

Illinois
Aurora: Aurora Illini Club
President: M. A. Kendall, '07, 715 Garfield blvd.
Secretary-Treasurer: W. B. Greene, '08, care Stephens-Adamson Co.
Belleville: The Illini Club of Belleville
President: L. N. Perrin, '07, Penn bldg.
Secretary: C. R. Ogle, '13, 617 E. B street
Centralia: Centralia Illini Club
President: Charles Wham, '12
Secretary-Treasurer: Eva Mitchell, '12, 135 N. Cherry street
Champaign: Champaign County Illini Club
President: I. U. Everhart, '09, 901½ W. California avenue, Urbana
Secretary-Treasurer: R. F. Little, '07, 606 Chalmers street, Champaign
Chicago: The Illini Club of Chicago
President: H. C. Coffeen, '98, 314 Federal street.
Secretary: R. E. Schreiber, '04, 1140 Otis bldg.
University of Illinois Alumnæ Association of Chicago
President: Mrs. A. L. Kuehn, '03, 220 S. Ridgeland avenue, Oak Park
Secretary-Treasurer: Mrs. R. E. Schreiber, '06, 1500 Farwell avenue
Decatur: Decatur Illini Club
President: W. J. Carey, '06, 718 W. Marietta street
Secretary-Treasurer: J. L. McLaughlin, '09, 502 Powers bldg.

La Salle County: La Salle County Illini Club
President: D. G. Cairns, '02, 633 Congress street, Ottawa
Secretary-Treasurer: J. R. Fornof, '10, 804 S. Park street, Streator
McLean County: McLean County Illini Club
President: Hal M. Stone, '03, 30 White place, Bloomington
Secretary-Treasurer: Jessie I. Lummis, '02, 307 North street, Normal
Peoria: Peoria Illini Club
President: Ross Hanson, 418 Dechman avenue
Secretary: C. O. Fischer, '12, 815 Jefferson bldg.
Rockford: University of Illinois Club of Rockford
President: C. K. White, '12, 116 N. Independence avenue
Secretary-Treasurer: W. F. Hull, '10, Manufacturers' National Bank Bldg.
Springfield: Springfield Illini Club
President: John R. Merriman, 407 W. Monroe street
Secretary: E. K. Stuart, '10
Vermilion County: Vermilion County Illini Club
President: A. R. Hall, '01, Daniel bldg., Danville
Secretary-Treasurer: Madge Gundy, '09, Bismarck
Western Illinois: Western Illinois Illini Association
President: W. E. Whiteside, '07, Moline
Secretary-Treasurer: James M. Johnston, '09, Moline

Indiana
Indianapolis: Indianapolis Illini Club
President and Acting Secretary: C. E. Sargent, '86, 2272 N. Meridian street

Iowa
Des Moines: Des Moines Illini Club
President and Acting Secretary: L. S. Ross, '89, 1308 Twenty-seventh street

Michigan
Detroit: The University of Illinois Alumni Association of Detroit
President: T. W. Walton, '10, 303 Y. M. C. A. bldg., Detroit
Secretary-Treasurer: E. B. Pletcher, '11, 303 Y. M. C. A. bldg., Detroit

Minnesota
Minneapolis: University of Illinois Alumni Club of Minneapolis
President: H. E. Kahlert, '08, 209 Third avenue, south
Secretary: Mrs. H. M. Turner, '08, 719 S. E. Erie street

Missouri
Kansas City: University of Illinois Southwestern Alumni Association
President: G. E. Tebbetts, '99, Kansas City Terminal Railway, Kansas City
Secretary: D. C. Ketchum, '99, 518 New York Life Bldg., Kansas City
St. Louis: The Illini Club of St. Louis
President: George E. Pfisterer, '08, 1414 Chemical bldg., St. Louis
Secretary-Treasurer: A. B. Remick, 1651 Pierce bldg., St. Louis

New York
New York City: University of Illinois Alumni Association of New York
President and Acting Secretary: F. L Davis, '88, 1713 Flatiron bldg.
Schenectady: The Illini Club of Schenectady
President: J. D. Ball, '07, care General Electric Co.
Secretary-Treasurer: O. E. Grigsby, '11, consulting engineering dept., General Electric Co.

North Dakota
Fargo: Fargo Illini Club
President: E. S. Keene, '90, 1028 Seventh street, N.
Secretary-Treasurer: Frank White, '80, Valley City

Ohio
Cincinnati: Cincinnati Illini Club
President: F. L. Swanberg, '03
Secretary: C. M. Kennan, '12, Seventh and Walnut streets
Cleveland: The Illini Club of Cleveland
President: J. C. Cromwell, 86, Garrett-Cromwell Engineering Co., New England bldg., Cleveland
Secretary: W. E. Underwood, '08, 102 Holyoke avenue

Oregon
Portland: The Illinois Alumni Association of Portland

Pennsylvania
Pittsburgh: University of Illinois Club of Pittsburgh
President: C. D. Terry, '97, 1123 South avenue
Secretary-Treasurer: K. H. Talbot, '09, 522 Frick bldg.

Tennessee
Memphis: Memphis Illini Club
President: John W. Palmer, '10, Bank of Commerce and Trust bldg.
Secretary: E. S. Pennebaker, '10, care Union Railway Co., roadway dept.

Texas
Palacios: Gulf Coast Alumni Club
President: Mary Williamson Elder, '87
Secretary-Treasurer: Florence Williamson, '08

Utah
Inter-Mountain Alumni Association of the University of Illinois
President: Wesley E. King, 116 U street, Salt Lake City
Secretary: W. H. Gregory, 406 Utah Savings & Trust bldg., Salt Lake City

Washington
Puget Sound Association of the alumni and former students of the University of Illinois
President: I. H. Hill, '99, 622 Provident bldg., Tacoma
Secretary-Treasurer: Edwin E. Bullard, '06, 622 Provident bldg., Tacoma

Wisconsin
MADISON: University of Illinois Club of Madison
President: A. V. Millar, '97, 1011 Grant street
Secretary: Frank White, '09, 407 Sterling court
MILWAUKEE: University of Illinois Alumni Association of Milwaukee
President: H. T. McAllister, '10, 201 Twenty-second street
Secretary-Treasurer: Charles Hall, '06, 186 Thirteenth street

FOREIGN ALUMNI ASSOCIATIONS

India
University of Illinois Association of India
President: George C. Hewes, '83, M. E. Mission, Sitapur, Oudh, India
Secretary: Agnes G. Hill, '92, Y. W. C. A., Lucknow, India

Japan
Illini Club of Japan
President: S. Shiga, '93, Tokyo Technical School, Tokyo
Secretary: G. Fujimura, '11, Agricultural Experiment Station, Taihoku, Formosa

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